

PROGRAM

WORLD SUMMIT TOUR 2017

NICE

Because inspiration and
confidence matters.



**Dentsply
Sirona**
Implants



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World Summit Tour app



Stay up-to-date on all the latest information for the Nice tour stop.

Download the World Summit Tour 2017 app in AppStore or Google Play.



Social media

Like and share our posts from the congress and publish on your own social media using the hashtag #WorldSummitTour.

As an attendee of the World Summit Tour program in Nice, please note that you/your likeness may be captured in photographs and videos by the professional photographers and videographers that will be on site.

One tour. Four stops. Endless inspiration.

We are happy to welcome you to the World Summit Tour 2017 —the scientific congress on implant dentistry.

During the next two days, we will take a journey of discovery with a scientific committee of industry leaders and renowned international and regional speakers; a journey led by our shared passion for implant dentistry and a commitment to science, documentation, education and innovation.

We meet here in Nice as a part of our goal for creating a world where everyone can eat, speak, and smile with confidence. The driving forces of our daily work are not only to restore missing teeth, but to help give back quality of life and to restore happiness.

Through the presentation of clinical evidence and strategies for treatment success, as well as peer-to-peer discussions, we hope to further instill your confidence in knowing you are providing your implant patients with the best treatment solutions available.

We are truly grateful for your partnership and participation, and we hope to exceed your expectations in these coming days.

With warmest regards,



Lars Henrikson
Group Vice President
Dentsply Sirona Implants

Ok, let's go





A journey in science

Science is the foundation for all technology, it is a must for peace of mind and predictability.

Science in itself is without meaning, it only adds value when it is applied. Our dedication and devotion to the facts of science, not the whim of opinion, comes down to one thing—the best results possible for the benefit of your patients. Because they deserve scientifically-proven products and solutions that will last a lifetime.

You are about to experience a scientific program that brings together the best of science and clinical care, where current scientific news and the latest clinical and digital development within implant dentistry come together.

Featuring outstanding speakers and moderators and with a focus on the many aspects of implant dentistry and predictable clinical results, you can rest assured—everything you and your team need for inspiration and confidence is right here.

THE INTERNATIONAL SCIENTIFIC COMMITTEE



Read more about our committee members.



FRANK ZASTROW

Update in augmentation techniques—what are the basics, where are the limits?

13.00–17.00 📍 Room Galliéni 4
Lecture/hands-on

Speaker: **Frank Zastrow**



FRANK-MICHAEL MAIER

Solutions for the edentulous jaw—the convergence of prosthetics and surgery

13.00–17.00 📍 Room Galliéni 5
Lecture

Speaker: **Frank-Michael Maier**



MISCHA KREBS



PAUL WEIGL

Customized reconstructions in one single visit—labside and chairside

13.00–17.00 📍 Room Galliéni 1-2
Lecture

Speakers: **Mischa Krebs, Paul Weigl**



CHRISTIAN MOUSSALLY

Digital implant planning & prosthetic solutions within a single patient visit

13.00–17.00 📍 Room Risso 8a
Hands-on

Speaker: **Christian Moussally**

Refer to pages 35–42 for abstract details.



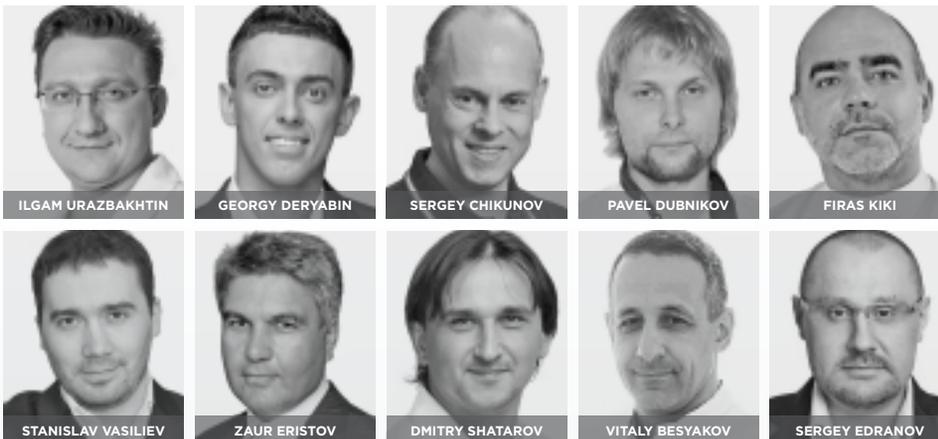
L'implantologie numérique pour ceux qui n'aiment pas l'informatique

This pre-congress session will be held in French only.

13.00–17.00 [📍 Room Hermès](#)

Lecture

Speakers: **Anne Delisle, Oliver C. Pin-Harry, Sébastien Felenc, Josselin Lethuillier, Laurent Sers, Julien Muffat-Jeandet**



Комплексные решения: современные подходы, новые возможности и простые альтернативы

This pre-congress session will be held in Russian only.

12.30–18.30 [📍 Hotel Negresco](#)

Lecture

Speakers: **Ilgam Urazbakhtin, Georgy Deryabin, Sergey Chikunov, Pavel Dubnikov, Firas Kiki, Stanislav Vasiliev, Zaur Eristov, Dmitry Shatarov, Vitaly Besyakov, Sergey Edranov**

SCIENTIFIC PROGRAM

JUNE
23

7.45 Doors open		
OPENING CEREMONY		
8.00–9.30 Partnering for health and well-being <i>Room Apollon</i>		
9.30–10.15 Coffee break—Poster Gallery and Inspiration Hub 		
10.15–11.45 Digital blueprint—beginning from the end <i>Room Athéna</i>	10.15–11.45 Life restored—solutions for the fully edentulous patient <i>Room Hermès</i>	10.15–11.45 The reality of complications <i>Room Apollon</i>
11.45–13.15 Lunch—Poster Gallery and Inspiration Hub 		
13.15–15.15 Inspiration TALKS—precision speaks for itself <i>Room Apollon</i>		
15.15–16.00 Coffee break—Poster Gallery and Inspiration Hub 		
16.00–17.30 Focus on Ankylos implant system—science and practice for long-term success <i>Room Athéna</i>	16.00–17.30 Focus on Astra Tech Implant System—long-term success and future realities <i>Room Apollon</i>	16.00–17.30 Focus on Xive implant system—ease of use for long-term success <i>Room Hermès</i>

JUNE
24

8.30–10.00 Treatment success with the patient in focus <i>Room Hermès</i>	8.30–10.00 Individualized protocols for patient-centered outcomes <i>Room Athéna</i>	8.30–10.00 Creating a sound biological foundation <i>Room Apollon</i>
10.00–10.45 Coffee break—Poster Gallery and Inspiration Hub 		
10.45–12.35 Outlook on a bright future (with Poster Competition Award ceremony) <i>Room Apollon</i> 		
CLOSING CEREMONY		
12.45–13.30 Lunch—Poster Gallery and Inspiration Hub 		



The scientific program sessions will be held in English and simultaneously translated into French, German, Russian and Turkish.

OPENING CEREMONY



MEIKE STIESCH



CHRISTOPH HÄMMERLE



JAN LINDHE



HUGO DE BRUYN



LYNDON COOPER

Partnering for health and well-being

8.00–9.30 Room Apollon

In broad terms, health can be looked at as something that is more than just the absence of disease. Healthy living consists of a good diet and physical exercise, but a happy and healthy life is also influenced by the individual balance that we achieve, and by finding comfort and joy in our social environment.

A key aspect of health is realized when we can eat, speak and smile with confidence. As a dental professional who provides implant care, you can make a significant difference for your edentulous patients by restoring function and esthetics. Together, let us examine the possibilities in our partnership and commitment to improved health, well-being and overall quality of life.

Moderators:

Meike Stiesch, *Germany*

Christoph Hämmerle, *Switzerland*

Speakers:

Jan Lindhe, *Sweden*

Bone loss around teeth in patients restored with implants

Hugo De Bruyn, *Belgium*

NICE benefits of implant treatment beyond survival

Lyndon Cooper, *USA*

Teeth for a lifetime

9.30–10.15 Coffee break

Visit the Poster Gallery and explore the Inspiration Hub with the Speakers' Corner and various hands-on activities.



Refer to pages 43–68 for abstract details.



STEFAN HASSFELD



PETER GEHRKE



CHRISTIAN MERTENS



JOSÉ DE SAN JOSÉ
GONZÁLES



GORAN BENIC

Digital blueprint—beginning from the end

10.15–11.45 📍 Room Athéna

Let's begin at the end. With digital dentistry, we can! It allows us to define the final desired result and to plan the treatment needed to achieve it. Digital connectivity leads to expanded solutions and the ability to provide treatment to more patients—all while starting with the end result in mind.

Moderator:

Stefan Hassfeld, *Germany*

Speakers:

Peter Gehrke, *Germany*

CAD/CAM implant prosthodontics—the digital race for quality has no finish line

Christian Mertens, *Germany*

José de San José Gonzáles, *Germany*

Anterior maxilla—digital treatment concepts for predictable outcomes

Goran Benic, *Switzerland*

Esthetic predictability through digital technologies



NELE VAN ASSCHE



ERNEST CHOLAKIS



FRED BERGMANN



ASHOK SETHI



WAEI ATT

Life restored—solutions for the fully edentulous patient

10.15–11.45 📍 Room Hermès

There is a variety of solutions designed to meet the individual needs of fully edentulous patients. These options take into account clinical situations, financial requirements and patients' expectations. Despite the different considerations and final method of treatment selected, what remains the same is the goal of restored ability for patients to eat, speak and smile with confidence.

Moderator:

Nele Van Assche, *Belgium*

Speakers:

Ernest Cholakis, *Canada*

Conus Abutment—a new implant supported prosthetic concept for treating edentulous patients

Fred Bergmann, *Germany*

Multioptional prosthetic solutions for the restoration of the atrophied alveolar ridge

Ashok Sethi, *United Kingdom*

Esthetic restorations using prefabricated abutments

Wael Att, *Germany*

Digital workflow for the rehabilitation of the edentulous jaw

Refer to pages 43–68 for abstract details.



MARIANO SANZ

ANN-MARIE ROOS
JANSÅKER

NORBERT JAKSE



HAKAN UYSAL



THOMAS HANSER

The reality of complications

10.15–11.45 [📍 Room Apollon](#)

Complications are an inevitable clinical reality, both technically and biologically. What are the most frequent problems we see? How can complications be managed once they have happened? And what measures can be taken to prevent them from happening?

Moderator:

Mariano Sanz, *Spain*

Speakers:

Ann-Marie Roos Jansåker, *Sweden*

How to prevent biological complications

Norbert Jakse, *Austria*

Preventing failures and complications in augmentative surgery

Hakan Uysal, *Turkey*

Technical complications—are they inevitable?

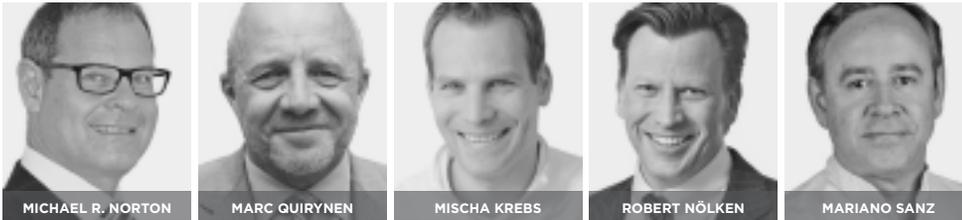
Thomas Hanser, *Germany*

Avoiding complications in regenerative implantology—the symbiosis between biology and clinical innovations, science and evolutionary materials

11.45–13.15 Lunch

Visit the Poster Gallery and explore the Inspiration Hub with the Speakers' Corner and various hands-on activities.





Inspiration TALKS—Precision speaks for itself

13.15–15.15 📍 Room Apollon

Precision is a word that creates expectations for both clinicians and patients. However, both predictable outcomes and happy patients can be a reality as a result of successful implementation of a precisely outlined diagnosis and treatment planning.

Moderator:

Michael R. Norton, *United Kingdom*

Speakers:

Marc Quirynen, *Belgium*

How to improve the accuracy of guided implant surgery?

Mischa Krebs, *Germany*

Absolute precision—a prerequisite for single-visit reconstructions and outstanding clinical success

Robert Nölken, *Germany*

Enhanced tissue support in extraction sockets and sloped ridges—grafting or guidance?

Mariano Sanz, *Spain*

The maintenance of healthy peri-implant tissues key element in the prevention and treatment of peri-implant diseases

15.15–16.00 Coffee break

Visit the Poster Gallery and explore the Inspiration Hub with the Speakers' Corner and various hands-on activities.



Focus on Ankylos implant system—science and practice for long-term success

16.00–17.30 📍 Room Athéna

Long-term hard and soft tissue stability and excellent esthetics are important outcomes for clinicians and their patients. With synergies of science and clinical practice, from diagnosis and planning to different surgical protocols and prosthetic options, clinicians and patients alike can experience successful outcomes, today and tomorrow.

Moderator:

Peter Gehrke, *Germany*

Speakers:

Nigel A. Saynor, *United Kingdom*

Contemporary implant concepts—predictable outcomes

Natasha Lioubavina-Hack, *Netherlands*

Long-term success of muco-gingival microsurgery around teeth and implants

Orcan Yüksel, *Germany*

Professional teams and hardware—complex case success is not a coincidence

Pablo Hess, *Germany*

Immediate loading in the edentulous jaw



Focus on Astra Tech Implant System—long-term success and future realities

16.00–17.30 📍 Room Apollon

Implant rehabilitation starts with the evaluation of the patient and the treatment plan, aimed at achieving excellent esthetics and predictable long-term results, even when treating compromised cases. Current options and future perspectives will be presented for an implant system that is clinically proven and well documented for its long-term marginal bone maintenance and outstanding esthetic results.

Moderator:

Marc Quiryne, *Belgium*

Speakers:

Helmut Steveling, *Germany*

An implant system through the ages—25 years of clinical success

Johan Abeelos, *Belgium*

Lieven Barbier, *Belgium*

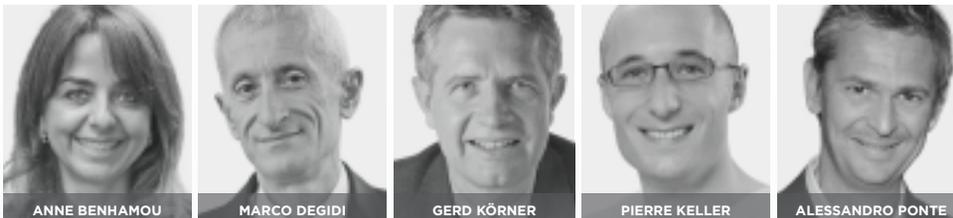
Cranial bone grafts used for the reconstruction of severely resorbed upper jaws giving immediate function for implant-supported bridges

Jan K. Pietruski, *Poland*

Individualized and streamlined processes for esthetic success

Marcus Dagnelid, *Sweden*

Modern approaches to proven concepts—CAD/CAM powering surgery and prosthetics



Focus on Xive implant system—ease of use for long-term success

16.00–17.30 📍 Room Hermès

Long-term experience and clinical evidence are key factors for a successful implant system. Surgical versatility with or without augmentation, in combination with prosthetic freedom, including patient-specific solutions, are prerequisites for optimal implant rehabilitation. In addition, let's look at soft tissue management, esthetic outcome, and what the future might bring.

Moderator:

Anne Benhamou, *France*

Speakers:

Marco Degidi, *Italy*

Xive implants—mission accomplished—successful results from 2001 to 2016

Gerd Körner, *Germany*

How to succeed in perio-compromised situations with Xive implants

Pierre Keller, *France*

Clinical experiences with bone regeneration techniques for successful esthetic and functional outcomes

Alessandro Ponte, *Switzerland*

Long-term clinical outcome of complex implant treatment—current and prospective protho-surgical philosophy



PAUL WEIGL



FERNANDO
ROJAS VISCAYA



ANDREA PARPAIOLA



NELE VAN ASSCHE



MARCUS DAGNELID

Treatment success with the patient in focus

8.30-10.00 📍 Room Hermès

What are the key factors that can make a difference in the treatment, resulting in happy and satisfied patients? Digital and analog processes and the tools that support treatment must be therefore precisely engineered and continuously evaluated to ensure the maintained level of accuracy that clinicians and patients desire. Precision speaks for itself throughout the treatment process and when its long-term impact on treatment care is understood.

Moderator:

Paul Weigl, Germany

Speakers:

Fernando Rojas Viscaya, Spain

The Virtual Implant Patient (VIP) protocol

Andrea Parpaiola, Italy

Clinical performance of CAD/CAM abutments

Nele Van Assche, Belgium

Not only patient results in happy patients

Marcus Dagnelid, Sweden

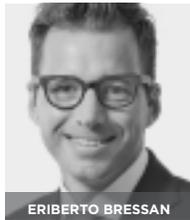
Gain success in your practice management and business—customer oriented approaches



DENIS CECCHINATO



MEIKE STIESCH



ERIBERTO BRESSAN



FELIX L. GULJÉ



THIERRY ROUACH

Individualized protocols for patient-centered outcomes

8.30-10.00 📍 Room Athéna

At the infancy of implant dentistry, there was a one-size-fit-all approach to treatment. With advancements in technology and clinical protocols, patients today, are able to receive solutions that are as unique as they are. But does such an individualized approach also mean an increase in complexity? Or can digital processes and new procedures help to simplify and streamline workflows so that optimal, patient-centered outcomes can be achieved without compromise to quality?

Moderator:

Denis Cecchinato, Italy

Speakers:

Meike Stiesch, Germany

Individualized CAD/CAM abutments—learning from nature

Eriberto Bressan, Italy

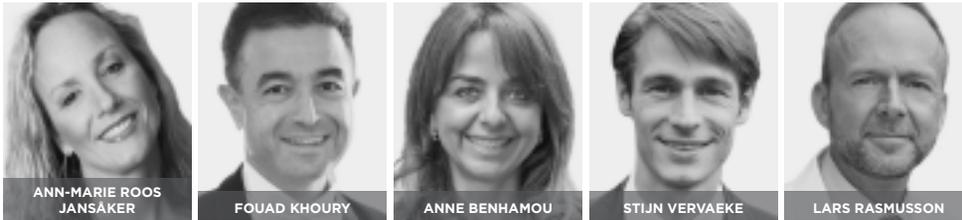
Advantages of conical abutments to prevent clinical complications in edentulous patients

Felix L. Guljé, Netherlands

Longer preparation for a short implant

Thierry Rouach, France

Treatment of fully edentulous patients with conus abutment—why choose between stability and easy maintenance?



Creating a sound biological foundation

8.30–10.00 Room Apollon

When the host body alone does not provide enough support, different biomaterials with different characteristics and tasks play an important role in the preparation of an implant site.

For both simple and complex implant cases, the building of and ability to maintain a solid biological foundation can contribute to the long-term, cost-effectiveness and efficiency of the overall treatment outcome.

Moderator:

Ann-Marie Roos Jansåker, *Sweden*

Speakers:

Fouad Khoury, *Germany*

Factors influencing long-term success of oral rehabilitation in cases of severe bone loss

Anne Benhamou, *France*

Regeneration in esthetical demanding cases—a biological and clinical approach

Stijn Vervaeke, *Belgium*

Post-extraction volumetric changes of the alveolar ridge—natural healing versus preservation techniques

Lars Rasmusson, *Sweden*

Adipose stem cells tissue-engineered bone for construction of large mandibular defects

10.00–10.45 Coffee break

Visit the Poster Gallery and explore the Inspiration Hub with the Speakers' Corner and various hands-on activities.



Refer to pages 43–68 for abstract details.



CHRISTOPH HÄMMERLE



DANIEL THOMA



PAUL WEIGL



MICHAEL R. NORTON

Outlook on a bright future

10.45–12.35  Room Apollon

The statement, “beauty is in the eye of the beholder,” implies that the perception of beauty is subjective. The outlook on the future of implant dentistry is full of unexplored possibilities and new opportunities for patients and clinicians.

Today, dental implant treatment is already making a huge difference for millions of people in their physical and emotional well-being. New solutions and possibilities designed to further improve the treatment process and outcomes continue to be developed and introduced. With a deeper understanding of patient desires and the increasing ability to meet or even exceed those, patients are happier. As a dental professional, you can be proud of the stories of inspiration that you are helping to create and the improved quality of life that you contribute to each day.

Together, let’s make the future brighter.

Moderator:

Christoph Hämmerle, *Switzerland*

Speakers:

Daniel Thoma, *Switzerland*

The right choice of hard- and software to optimize esthetics

Paul Weigl, *Germany*

Implant therapy and the virtual patient—safer and faster final outcome in reality

Michael R. Norton, *United Kingdom*

Evolution of an implant system—a better understanding of primary stability

Christoph Hämmerle, *Switzerland*

Digital implant dentistry—present and future

Poster Competition Award Ceremony

The award will be presented at the beginning of the session before the lecture program.



CLOSING CEREMONY

Lunch—Poster Gallery and Inspiration Hub



Refer to pages 43–68 for abstract details.

A night of inspiration & glamour

Friday, June 23, 19.00–1.00 📍 Cannes Palm Beach



Join us on a private beach on the French Riviera, a place of tradition, elegance and hospitality—the Cannes Palm Beach. Enjoy the live entertainment, food and drinks at our own version of the Cannes Film Festival—Avant Première.

Walk in the footsteps of famous artists such as Marilyn Monroe, Charlie Chaplin, Marlene Dietrich, Maurice Chevalier and Django Reinhardt. The only difference... tonight, you will be the star.

Dress code:

Smart casual / Dress like the star you are, be glamorous, shine on our red carpet and give the paparazzi a picture they will never forget.

Cost: € 195

Registration necessary

Transportation to the event will be provided, starting at 19.00. You will find a detailed schedule at the information desk at the Acropolis and in the World Summit Tour app.



Join the Poster Competition winners as they bask in the light of success

No scientific congress would be complete without the all-important Poster Competition, where aspiring scientists and experienced clinicians showcase their posters.

During the lunch break on June 23, the Scientific Committee will do a poster walk and the poster presenters will be available at their posters to answer questions.

On June 24, the Scientific Committee will present the winning posters in the categories Clinical Application and Research. The winners will go on to the Global Poster Competition.

[Join us and celebrate the best of the best in the Poster Gallery.](#)

Inspiration for the future

The Scientific Committee will award the winners in each category with € 1,500. The winners will be announced in the Poster Competition Award ceremony, held during the closing session on Saturday, June 24. Did your favorite poster and author win?

The Scientific Committee Nice



ANNE BENHAMOU



DENIS CECCHINATO



HUGO DE BRUYN



PETER GEHRKE



STEFAN HASSFELD



MICHAEL R. NORTON

The Scientific Committee reviews abstracts and selects the Poster Competition winners at the Nice tour stop.

Global Poster Competition Committee



JAN LINDHE



MARC QUIRYNEN,
CHAIRMAN

The Global Poster Competition Committee selects two global winners, one in each category, from the four tour stops. The global winners will be announced in December 2017.



Opening hours

Friday

7.30–18.00

Saturday

8.00–13.30

Inspiration Hub

Let's meet at the point where inspiration, knowledge and confidence come alive in dental implant treatment solutions.

Discover the latest products and protocols. Network with colleagues and friends—and get inspired.

Inspiration and confidence

Delivering the best results to implant patients require products and treatment concepts that offer you the freedom to create long-lasting, individualized solutions.

At Dentsply Sirona Implants, we are dedicated to providing clinically proven products of the highest quality and backed by extensive documentation because we believe this is the level of commitment you deserve for delivering optimized care.

As part of Dentsply Sirona, the global technology and innovation leader, our solutions make a difference to the lives of over six million dental patients every day—helping them eat, speak, and smile with confidence.

Discover enabling technologies and procedural solutions of our Dentsply Sirona partners

Aquasil® Ultra+

Material for implant impressions designed to perform in all areas—precision transfer of implant position, detail reproduction of surrounding soft tissue and dentition, handling, and patient experience.

Orthophos SL

The right solution for every practice, setting the standard for 2D and 3D digital images. Combining the highest image quality at the lowest dose with intuitive patented positioning aids.

CEREC

CAD/CAM solutions for restorations, implantology and orthodontics. Including scanning, designing, milling/grinding and sintering/glazing technology as well as a variety of materials.

Cercon HT and Celtra Duo

Restorative materials Cercon ht, the zirconia standard for color accuracy in the 16 classic Vita shades, and Celtra duo, the one and only CAD/CAM material that offers total workflow flexibility.

Teneo and Sinus

Digital treatment centers equipped for integrated implant dentistry workflows. With the integrated implant library of Teneo all implant systems by Dentsply Sirona are supported.

SiroLaser Blue

Therapy laser with a high level of precision for multiple indications including implant exposure, decontamination and clear preparation margins for taking impressions.



Play Click and win

Join the Click Photo Challenge in the World Summit Tour event app to win great prizes.

Refer to page 28 for details.



Regenerative solutions

Discover Symbios grafting materials, membranes and instruments to support you for all kinds of restorative needs.



Implant solutions

Ankylos, Astra Tech Implant System and Xive—our implant systems are well documented and clinically proven for life.

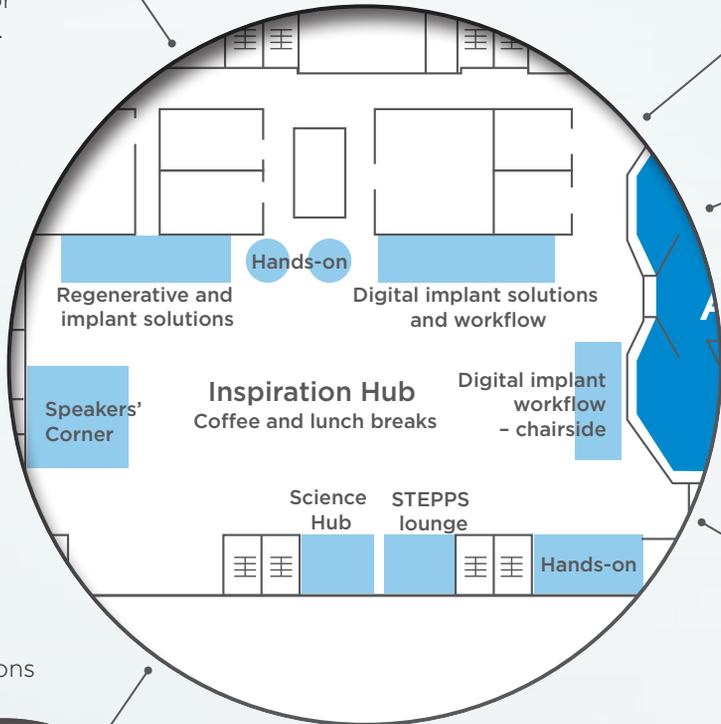
Learn about unique protocols and latest innovations.



Speakers' Corner

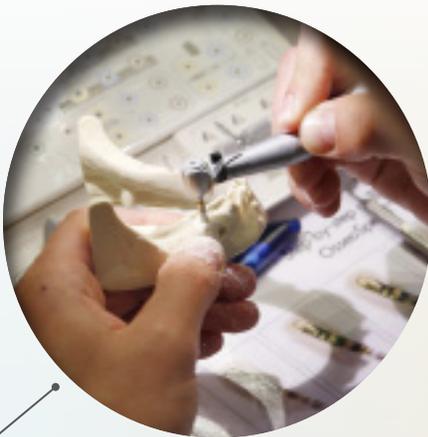
Innovative protocols and new business opportunities—listen to short presentations and meet the experts to discuss their approaches.

Program see page 25.



STEPPTS™ lounge

Re-energize at the STEPPTS lounge and speak with one of our representatives about marketing services available to you, as our valued partner, to develop your business—because partnership and support matters.



Hands-on training

Have a closer look at new products and innovative solutions and learn from experienced colleagues during practical hands-on training sessions.

Program see page 25.



Digital implant workflow—outsourced

Explore the clinic-to-laboratory digital implant workflow, including mySimplant Planning Service and outsourced design and manufacturing of patient-specific Atlantis abutments and suprastructures—enhanced with Dentsply Sirona 3D imaging technology and CAD/CAM solutions.



Digital implant workflow—chairside

Discover high-end technologies, like CEREC, Orthophos SL and Teneo, which enable you to deliver the best possible care to your patients now and in the future. Learn how these technologies can enhance your practice workflow and experience first-hand the chairside implant protocol.



Science hub

Meet our science and research experts to learn about our clinical solutions and emerging innovations and how they are backed by sound science.

Experience a close encounter with our implant surfaces and biomaterials through the Virtual Reality glasses and get to know more about our global clinical research supporting all our product and solution areas.

Let's go forward together—backed by sound science.

Innovation and highlights

Discover the latest highlights and innovations from our comprehensive portfolio for all phases of implant dentistry.



mySimplant® Planning Service

A digital treatment planning service for guided surgery that enables clinicians to treat more patients with enhanced safety, and predictability.



OsseoSpeed® Profile EV

A unique dental implant specifically designed for efficient use of available bone in sloped ridge situations.



Symbios® Xenograft Granules

A porcine bone mineral providing more space for new bone deposition.



SmartFix® concept

Providing edentulous patients with an immediate fixed, full-arch prosthetic, supported by four implants.



Symbios® Collagen Membrane pre-hydrated

The first unique, predictable and pre-hydrated regenerative solution consisting of purified intact collagen tissue derived from bovine pericardium.



Atlantis® CustomBase solution

The first true patient-specific, two-piece, screw-retained solution.

Digital implant workflow

Moving dental care forward requires progress within and across dental disciplines. Enabling technologies fundamentally change what is possible. Procedural solutions, based on a variety of materials and innovative methods, ensure the best possible results for the patients. The combination ensures better, safer, faster dental care.

One of the best examples is the complete digital implant workflow only Dentsply Sirona can offer dental professionals to choose their preferred protocol.

- Clinic-to-laboratory, including outsourced planning, design and manufacturing of the patient-specific restorative solution
- Chairside, from digital implant planning to the restorative solution within a single patient visit

Explore both protocols at the Inspiration Hub

Guided tours are offered during lunch and coffee breaks:

Friday at 9.45, 12.00, 12.30 and 15.30

Saturday at 10.10

Speakers' Corner

Innovative protocols and new business opportunities—join short presentations at the Inspiration Hub during all breaks and meet the experts at the booth to discuss their approaches.

Friday, June 23

- 9.40 **Anthony Bendkowski**, United Kingdom
SmartFix concept – a cost-effective business opportunity for successful clinics
- 9.50 **José Antonio Alonso**, Spain
Digital flexibility at your fingertips—treat more patients through digital implant planning service for guided surgery
- 12.00 **Marcus Dagnelid**, Sweden
Success in referral based dentistry—new ideas on study clubs for the future generation
- 12.10 **Anthony Bendkowski**, United Kingdom
SmartFix concept—a cost-effective business opportunity for successful clinics
- 12.20 **Uli Hauschild**, Germany
Efficiency and optimized results with guided surgery applying a full digital workflow
- 12.30 **David Wong**, USA
The latest pre-hydrated resorbable pericardium membrane for correcting gingival recession
- 12.40 **Christian Moussally**, France
What you see is what you get—how Dentsply Sirona surgical guides turn virtual plans precisely into reality
- 15.25 **Paul Weigl**, Germany
The role and responsibilities of referring dentists for esthetics demanding implant restored single tooth solutions
- 15.35 **Florian Piquet**, France
Aquasil Ultra+ for implant impressions without compromise

Saturday, June 24

- 10.10 **Svein Thorstensen**, Norway
Advanced medical and technical realizations with Atlantis solutions
- 10.20 **Robert Nölken**, Germany
Enhanced tissue support in extraction sockets and healed ridges with sloped implant design

Hands-on training

Have a closer look at new products and innovative protocols. Learn from experienced colleagues during practical hands-on sessions.

Registration: Please sign in for your hands-on training at the booth of the respective concept or solution.

SmartFix concept for Astra Tech Implant System EV—the smarter solution for restoring smiles

Stephen Jacobs, UK and Jan Levén, Sweden
30-minutes hands-on classroom, max. 12 participants
Friday: 10.10-10.40, 12.40-13.10, 15.20-15.50
Saturday: 10.10-10.40

OsseoSpeed Profile EV—breaking conventional thinking for increased patient satisfaction

Gido Bornemann, Germany
30-minutes hands-on classroom, max. 12 participants
Friday: 11.50-12.20, 16.10-16.40
Saturday: 9.20-9.50

mySimplant Planning Service—digital implant planning service for guided surgery, focus on outsourced planning with Dentsply Sirona quality control

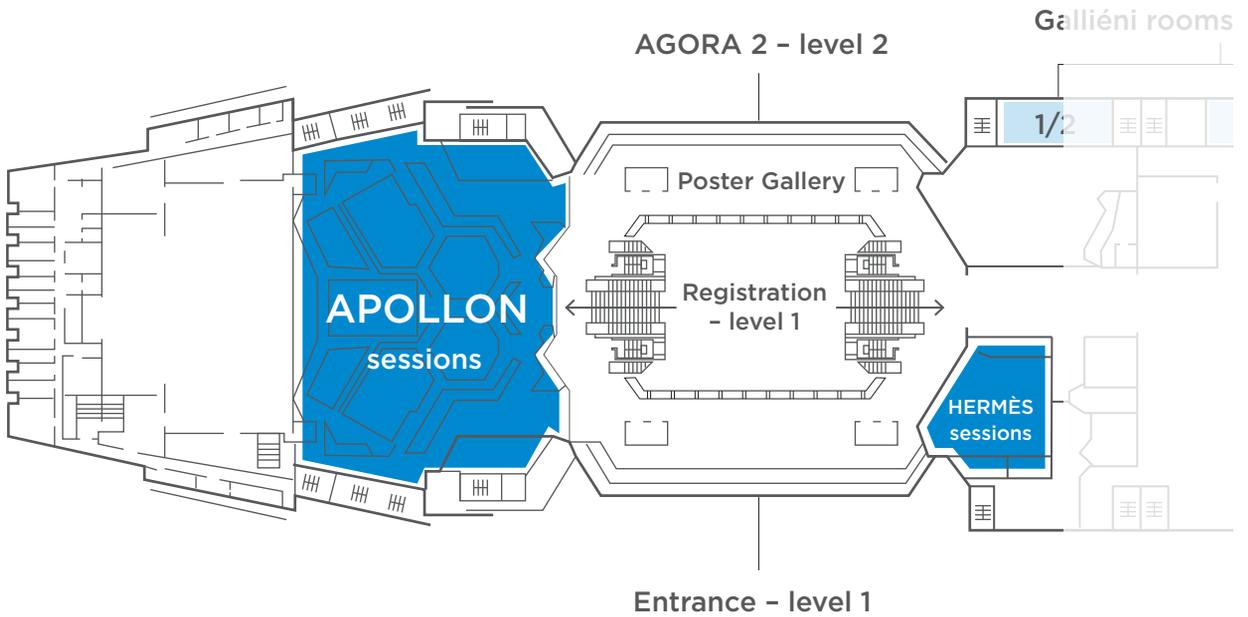
Lars Magnus Almgren, Sweden
30-minutes hands-on classroom, max. 12 participants
Friday: 11.45-12.15, 12.40-13.10, 15.20-15.50, 16.20-16.50
Saturday: 10.00-10.30

Augmentation of a horizontal bone defect—hands-on application of Symbios Xenograft Granules and Symbios Collagen Membrane pre-hydrated

Frank Zastrow and Zoltan Adrashazi, Germany
20-minutes peer-to-peer training, max. 4 participants
Friday: 9.50, 10.00, 12.00, 12.10, 12.40, 12.50, 15.20, 15.30, 16.10 and 16.20
Saturday: 10.10 and 10.20

Digital implant planning & prosthetic solutions within a single patient visit

Christian Moussally, France
2 x 90-minutes hands-on, max. 20 participants
Friday: 10.15-11.45 and 16.00-17.30
Saturday: 8.30-10.00 and 13.00-14.30



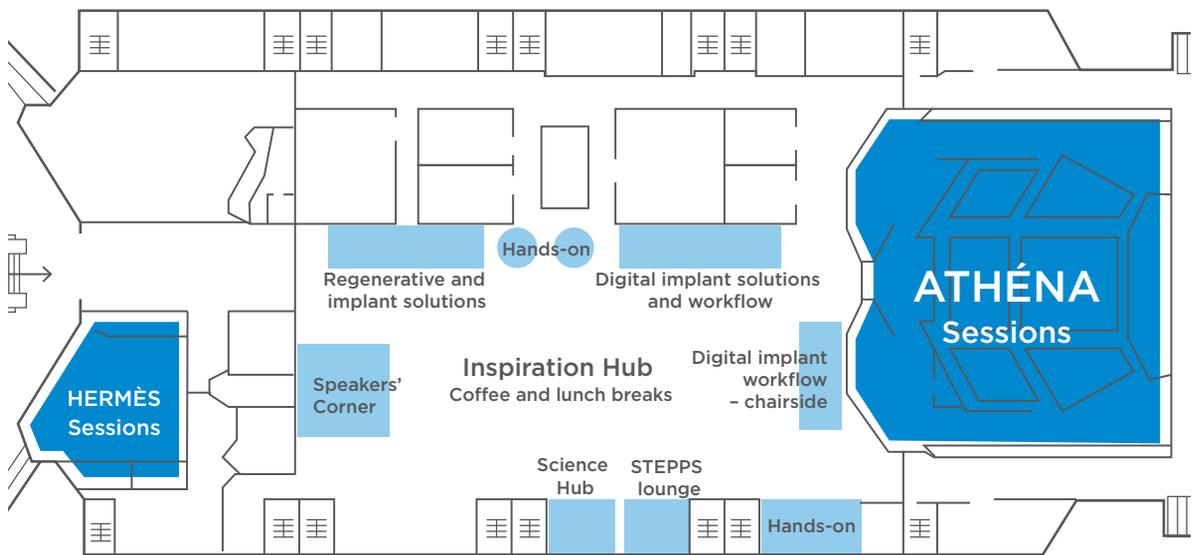
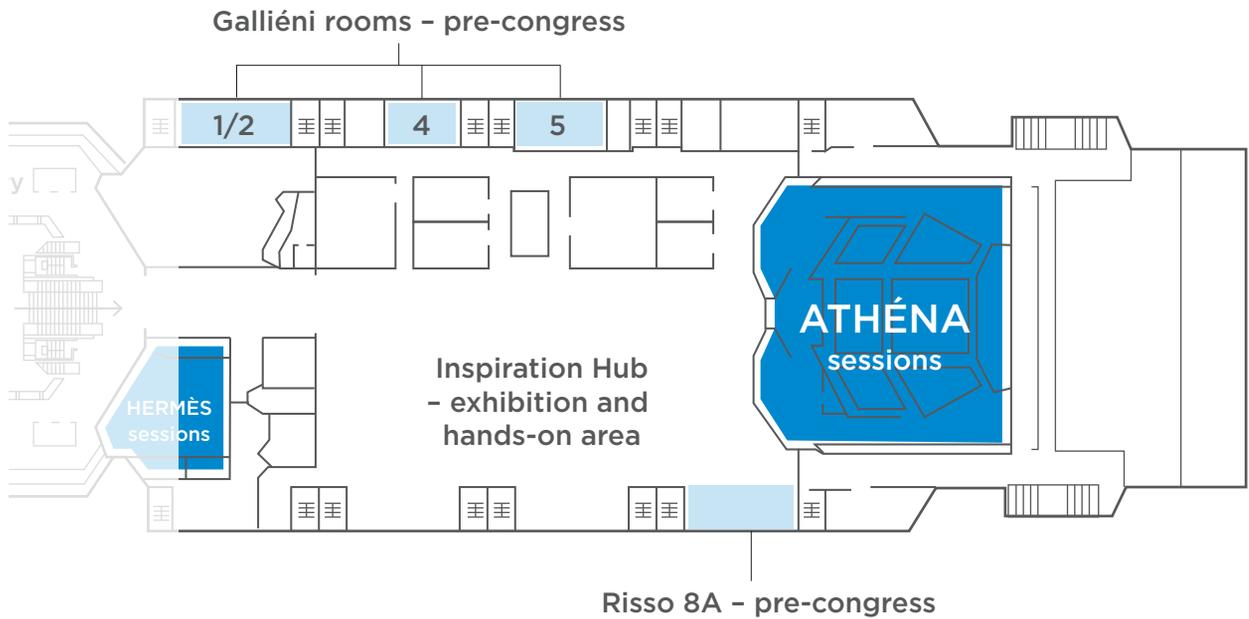
Entrance level/Registration area: Level 1

Session rooms: Apollon, Athéna, Hermès

Pre-congress rooms: Hermès, Galliéni, Risso 8

Exhibitions: Rhodes

Poster Gallery: Agora 2 - level 2



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Internet access

Wi-Fi: DentsplysironaWIFI
Password: Nice2017



Event feed

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Information

If you are looking for information about the event, activities, the app, the company, local restaurants, or things to do around town—you can find it all here.



Play Click and win

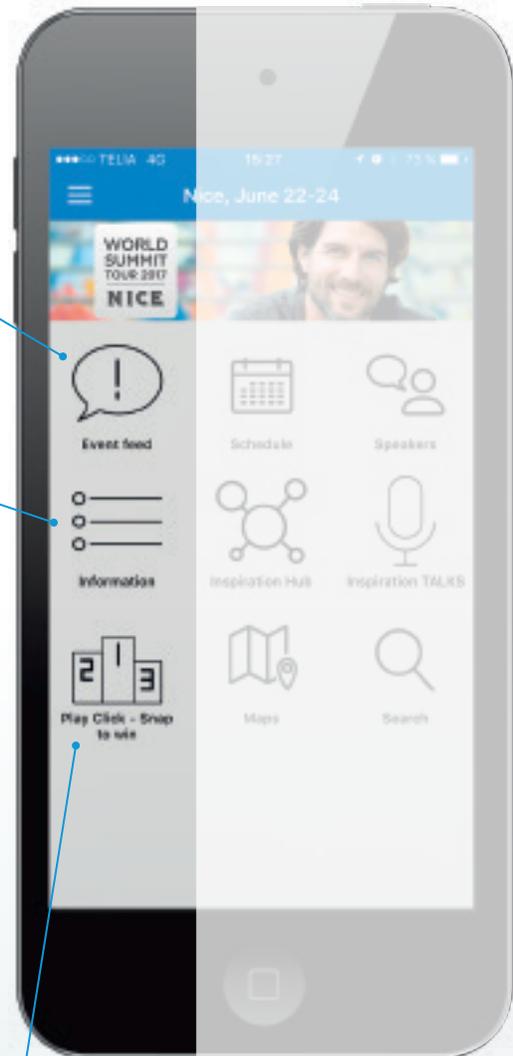
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Complete the challenges by exploring the Inspiration Hub and snap photos to share in the app's live photo feed.

When you have completed all challenges in a category, you will earn a badge. Three contestants that have completed all the challenges correctly, creatively and on time will win great prizes!

There is no better time than now, so accept the challenge to win.

[Click here in the app for more details.](#)





Schedule

Get an overview of the schedule for each day, or create your own schedule by adding the programs you are most interested in under the “My Schedule” tab.




Speakers

Speakers are listed in alphabetical order by last name, so you can easily find the details, program times and locations of their presentation.



Inspiration TALKS

Use the app to interact with the stage—ask questions, influence the discussions and join the quiz to win an Apple Watch.



Inspiration Hub

Find opening hours and get a description for what you can find at each of the different areas.

Don't have iOS or Android?

Scan the QR code and verify your account to use the mobile web version of the app instead.



Getting around

Relax and enjoy yourself. We've worked hard to make getting around as easy as possible, so you can explore and be inspired at your leisure.



Congress venue

Acropolis Convention Centre
Acropolis Convention Centre Nice,
1 Esplanade John Fitzgerald
Kennedy, 06000 Nice, France
Phone +33 (0)4 93 92 83 00
www.sean-acropolis.com/en/



Internet access

Free, wireless internet access will be provided throughout the congress area.
Wi-Fi: DentsplysironaWIFI
Password: Nice2017



Registration opening hours

The registration desk is located at the entrance level of the Acropolis Convention Centre and open during the following hours:

Thursday, June 22

9.00–20.00

Friday, June 23

7.00–18.00

Saturday, June 24

7.00–18.00



Name badges

Please have your name badge with you and visible at all times, as this is your pass to the World Summit Tour program and exhibition. If you lose your badge, please stop by the Registration Desk.



Lost & found

Lost and found items will be handled by the registration desk.



Photography & videotaping

Please note that photography and videotaping by delegates is prohibited during all scientific sessions.



Breaks

Please note that coffee breaks and lunch on Friday, and the coffee break on Saturday will be served in the exhibition area.

Thursday, June 22

Coffee breaks: for pre-congress participants only

Friday, June 23

Coffee break: 9.30–10.15
Lunch: 11.45–13.15
Coffee break: 15.15–16.00

Saturday, June 24

Coffee break: 10.00–10.45
Lunch: 12.45–13.30



World Summit Tour app

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Personal, property & information security

Please note the emergency exits and routines at the congress venue and hotels. Please do not leave valuables, including laptops, unattended at any time. Please do not leave sensitive information or congress material behind at the venues or in the hotel room. Please report any lost or stolen property to the registration desk, or to the evening event security staff.



Emergency

In case of emergency, please call 112 and immediately notify the nearest congress/event/hotel staff.



Evening event tickets

If you are registered for the evening event, a symbol indicates this on your name badge. The name badge is also your ticket to the evening event at the Cannes Palm Beach, so don't forget to bring it with you. For more info, please visit the registration desk.



Contacts

Dentsply Sirona Implants
Aminogatan 1, 431 53 Mölndal, Sweden
Nice2017@mci-group.com
worldsummittour@dentsplysirona.com



Travel card

A "Pass Congrès" travel card, valid Thursday, June 22, to Saturday, June 24, is included in the registration fee for all delegates. The travel card entitles you to unlimited travel on buses and trams in the Lignes d'Azur network. The travel card will be provided when picking up your registration badge at the Acropolis.



JOHAN ABELOOS



LARS MAGNUS
ALMGREN



WAEI ATT



LIEVEN BARBIER



ANNE BENHAMOU



ANTHONY
BENDKOWSKI



GORAN BENIC



FRED BERGMANN



VITALY BESYAKOV



ERIBERTO BRESSAN



DENIS CECCHINATO



SERGEY CHIKUNOV



ERNEST CHOLAKIS



LYNDON COOPER



MARCUS DAGNELID



HUGO DE BRUYN



ANNE DELISLE



JOSÉ DE SAN JOSÉ
GONZÁLEZ



MARCO DEGIDI



GEORGY DERYABIN



PAVEL DUDNIKOV



SERGEY EDRANOV



ZAUR ERISTOV



SÉBASTIEN FELEUC



PETER GEHRKE



FELIX L. GULJÉ



THOMAS HANSER



STEFAN HASSFELD



ULI HAUSCHILD



PABLO HESS



CHRISTOPH
HÄMMERLE



STEPHEN JACOBS



NORBERT JAKSE



PIERRE KELLER



FOUAD KHOURY



FIRAS KIKI



MISCHA KREBS



GERD KÖRNER



JOSSELIN
LETHUILLIER



JAN LINDHE



NATASHA
LIOUBAVINA-HACK



FRANK-MICHAEL
MAIER



CHRISTIAN MERTENS



CHRISTIAN
MOUSSALLY



JULIEN MUFFAT-
JEANDET



MICHAEL R. NORTON



ROBERT NÖLKEN



ANDREA PARPAOLA



JAN K. PIETRUSKI



OLIVER C. PIN-HARRY



ALESSANDRO PONTE



MARC QUIRYNEN



LARS RASMUSSEN



FERNANDO ROJAS
VISCAYA



ANN-MARIE ROOS
JANSÄKER



THIERRY ROUACH



MARIANO SANZ



NIGEL A. SAYNOR



LAURENT SERS



ASHOK SETHI



DMITRY SHATAROV



HELMUT STEVELING



MEIKE STIESCH



DANIEL THOMA



SVEIN THORSTENSEN



ILGAM URABAKHTIN



HAKAN UYSAL



NELE VAN ASSCHE



STANISLAV VASILIEV



STIJN VERVAEKE



PAUL WEIGL



DAVID WONG



ORCAN YÜKSEL



FRANK ZASTROW

Faculty

The World Summit Tour is proud to feature renowned international and regional speakers and moderators that are committed to the latest research, innovations and clinical data in their area of expertise.

Johan Abeloos, *Belgium*

Lars Magnus Almgren, *Sweden*

Wael Att, *Germany*

Lieven Barbier, *Belgium*

Anne Benhamou, *France*

Anthony Bendkowski,
United Kingdom

Goran Benic, *Switzerland*

Fred Bergmann, *Germany*

Vitaly Besyakov, *Russia*

Eriberto Bressan, *Italy*

Denis Cecchinato, *Italy*

Sergey Chikunov, *Russia*

Ernest Cholakis, *Canada*

Lyndon Cooper, *USA*

Marcus Dagnelid, *Sweden*

Hugo De Bruyn, *Belgium*

Anne Delisle, *Canada*

José de San José González,
Germany

Marco Degidi, *Italy*

Georgy Deryabin, *Russia*

Pavel Dudnikov, *Russia*

Sergey Edranov, *Russia*

Zaur Eristov, *Russia*

Sébastien Felenc, *France*

Peter Gehrke, *Germany*

Felix L. Guljé, *Netherlands*

Thomas Hanser, *Germany*

Stefan Hassfeld, *Germany*

Uli Hauschild, *Germany*

Pablo Hess, *Germany*

Christoph Hämmerle, *Switzerland*

Stephen Jacobs, *United Kingdom*

Norbert Jakse, *Austria*

Pierre Keller, *France*

Fouad Khoury, *Germany*

Firas Kiki, *Russia*

Mischa Krebs, *Germany*

Gerd Körner, *Germany*

Josselin Lethuillier, *France*

Jan Lindhe, *Sweden*

Natasha Lioubavina-Hack,
Netherlands

Frank-Michael Maier, *Germany*

Christian Mertens, *Germany*

Christian Moussally, *France*

Julien Muffat-Jeandet, *France*

Michael R. Norton, *United Kingdom*

Robert Nölken, *Germany*

Andrea Parpaiola, *Italy*

Jan K. Pietruski, *Poland*

Oliver C. Pin-Harry, *Canada*

Alessandro Ponte, *Switzerland*

Marc Quirynten, *Belgium*

Lars Rasmusson, *Sweden*

Fernando Rojas Viscaya, *Spain*

Ann-Marie Roos Jansåker, *Sweden*

Thierry Rouach, *France*

Mariano Sanz, *Spain*

Nigel A. Saynor, *United Kingdom*

Laurent Sers, *France*

Ashok Sethi, *United Kingdom*

Dmitry Shatarov, *Russia*

Helmut Steveling, *Germany*

Meike Stiesch, *Germany*

Daniel Thoma, *Switzerland*

Svein Thorstensen, *Norway*

Ilgam Urzabakhtin, *Russia*

Hakan Uysal, *Turkey*

Nele Van Assche, *Belgium*

Stanislav Vasiliev, *Russia*

Stijn Vervaeke, *Belgium*

Paul Weigl, *Germany*

David Wong, *USA*

Orcan Yüksel, *Germany*

Frank Zastrow, *Germany*



Abstract book

Pre-congress program and Faculty



Frank Zastrow
Germany

Update in augmentation techniques— what are the basics, where are the limits?

Frank Zastrow is an experienced oral surgeon and former senior physician in the clinic of Prof. Fouad Khoury in Schloss Schellenstein. He has his own private clinic in Wiesloch, Germany, and his main focus is on reconstruction in complex cases, an area in which also lectures internationally.

In many cases, bone augmentation is necessary before implants can be inserted. Additionally, the soft tissue management can be a decisive factor for the implant success. In all cases, the “gold standard” of using autologous bone is in competition with the use of Bone Graft Material products; or is the combined use of autologous bone and other BGMs the more preferable way?

This workshop addresses all clinicians who have experience in augmentation and want to learn different bone harvesting and augmentation techniques for different clinical situations. Clear guidelines for the use of autologous bone blocks, BGMs and the classic GBR-techniques with resorbable collagen membranes in order to achieve predictable results will be provided by the oral surgeon Dr. Frank Zastrow. In the hands-on session, relevant soft tissue management and bone harvesting techniques will be demonstrated and practiced, as well as the use of the new Symbios products on synthetic models.

Learning objectives:

- Clear guidance for decision-making, when to use which methods and material.
- Safe handling when harvesting and working with autogenous bone blocks.
- Learning step-by-step procedures with GBR technique and sinus lift.



Frank-Michael Maier

Germany

Solutions for the edentulous jaw—the convergence of prosthetics and surgery

Frank-Michael Maier graduated from University of Tuebingen, Germany. For several years, he worked in a private prosthetic dental practice and in a clinic for maxillofacial surgery. Since 2001, he has his own private practice specializing in implant surgery and prosthodontic rehabilitations. He is a board member of the Gnathologic Circle Stuttgart and lectures on various aspects of implant surgery and restorative dentistry. His research areas deal with all-ceramic restorations, implant-abutment-connections, double crowns on implants and bone regeneration. In 2014, he was awarded for a publication as the best practical work by the *Journal of Dental Implantology*.

The treatment of the edentulous jaw is complex and requires different approaches to meet the wishes, function, esthetics, general health and budget of the patients. New developments in 3D planning, augmentation techniques and prosthetic components help to simplify the workflow. To be successful, a gnathologic analysis and simulation of the treatment goal in the beginning is essential.

This course offers a new perspective on treatment concepts and provides new tools for daily work. Discussions will focus on which cases are suitable for fixed and for removable dentures. Which connective elements are most suitable and when immediate loading is useful will also be covered.

Learning objectives:

- News: Introduction of new developments as conus concept, SmartFix concept, additive manufacturing and guided surgery.
- Success: Reaching the treatment goals by simplified backward planning, communication, teamwork and using 3D-planning software.
- Decision: Which treatment is suitable for which patient?



Mischa Krebs
Germany



Paul Weigl
Germany

Customized reconstructions in one single visit—labside and chairside

Mischa Krebs is assistant professor in the department of oral surgery and implant dentistry of the Goethe University, Frankfurt, Germany and private practitioner. His research focuses on clinical trials and new digital technologies. His passion is to improve clinical results and patient comfort with new digital workflows.

Paul Weigl graduated from the University of Munich Dental School in 1989. Since 1992 he has worked as an assistant professor and director of preclinical studies for the Department of Prosthodontics of the Johann Wolfgang Goethe-University Frankfurt am Main. Dr. Weigl has special focus in the field of prosthetics on implants. He is also a senior specialist at the Department of Prosthodontics, University of Frankfurt. Additionally he runs R&D projects to develop an effective and minimally invasive therapy concept for predictable esthetic results. Since four years he runs as a head the Department of Postgraduate Education.

The therapy of a single tooth gap with an implant-borne crown has now become a standard and is one of the most common indications for implant placement. Individually designed and CAD/CAM-manufactured abutments for dental implants offer a variety of clinical advantages and CAD/CAM manufacturing of full-ceramic crowns has become standard. Besides the fabrication of these parts in a dental lab, new trends show high quality standardized productions by industrial partners as well as a trend to fabricate these parts chairside by the dentist. In cases with sufficient primary stability, an immediate reconstruction with a temporary crown shows favorable results.

Two digital workflows will be presented step by step and clinical cases with different implant systems will support the understanding of the workflows. The workflows will be compared in a matrix to describe existing differences in various parameters, from total investment and maintenance of equipment to required skills and esthetic outcome.

Learning objectives:

- Follow a workflow of single tooth restorations on dental implants supported by a chair-side milling machine (CEREC).
- Follow a workflow with prefabricated patient specific prosthetic components (Immediate Smile) delivered ahead of full-guided surgery (Simplant).
- Recognize advantages and time-saving potential by integrating chair-side systems in comparison to an integrated workflow with outsourcing.
- Improve the decision process whether to invest in a chair-side milling system or to change the workflow with outsourcing.



Christian Moussally

France

Digital implant planning & prosthetic solutions within a single patient visit

Christian Moussally practices in his private clinic in Paris as a general practitioner. He has been using CEREC for several years starting in 2002 and has a vast experience in this field. After receiving his dental degree at the University of Paris – Descartes (France) he continued his education in Implant Dentistry in 2003 and “Continuing Dental Education”. As a visiting professor in CAD/CAM technology at University of Paris – Descartes Dr. Moussally can share his academic and practical view on chairside implant planning.

“Now, my dentist can carry out the entire implant treatment on his own without having to send me to another specialist. That means the entire process is faster and more convenient for me.”

If this is the statement you are looking for from your patients we will walk you through the workflow of Dentsply Sirona. Safe Surgery is guaranteed by carrying out the prosthetic planning in addition to the implant planning so that you can ensure that the implant is properly positioned. The digitally planned position can precisely be applied to the patient using surgical guides produced in the practice with a CEREC milling unit. Furthermore, Individual Prosthetics make sure that soft tissue and esthetics will be handled individual to this patient’s needs. Customized abutments and screw-retained crowns can be easily designed in the CEREC SW and milled out within less than 30 min.

The hands-on will focus on having every participant scan a model with CEREC, match the CBCT scan from Orthophos SL and the CEREC scan in the GALAXIS implant planning software, plan an implant and design the related surgical guide. The surgical guides will also be milled on-site and used for the hands-on in the clinical case. Additionally, the participants will design an individual healing abutment to shape the emergence profile.

Learning objectives:

- Experience CEREC Omnicam and Orthophos SL first-hand – every participant will scan with an Omnicam.
- See how easy the process of combining the restorative CAD/CAM proposal with the CBCT scan really is – and how you and your patient benefit from it.
- Design your own surgical guide & screw-retained crown and discover how owning this process can provide better clinical outcome.
- Exchange with your colleagues on the future of implantology.



Ilgam Urazbakhtin
Russia



Georgy Deryabin
Russia



Sergey Chikunov
Russia



Pavel Dubnikov
Russia



Firas Kiki
Russia



Stanislav Vasiliev
Russia

The following pre-congress session will be held in Russian only

Комплексные решения: современные подходы, новые возможности и простые альтернативы

Ilgam Urazbakhtin is an oral & maxillofacial surgeon, heading the Department of Surgery at AG Faber Dentaplant in Ufa, Russia. He has focused on improving esthetic rehabilitation in vertical ridge augmentation as well as horizontal ridge splitting.

Georgy Deryabin specializes in implantology, oral and maxillofacial surgery as well as orthognatic surgery. He is the co-author of the book "Bilateral Sagittal Split Osteotomy of the Mandible in Detail", and has a private practice in Moscow.

Sergey Chikunov has a private practice "Art Oral Moscow" since 1993. He has defended two doctoral theses and authored more than 70 articles published in Russia and abroad. He is a President of the Gnathology section of Russian Dental Association. He has a special interest in how to use digital technologies for planning and performing highly demanding cases in complex clinical areas.

Pavel Dudnikov is a head of prosthodontic department in "Firadent" since 2006. He is a founder of the ALL IN ONE DAY concept for immediate loading in edentulous jaws.

Firas Kiki is maxillo-facial surgeon with a private practice since 1996. He has been engaged in lecturing and clinical outcome evaluations for Astra Tech since many years. He is an Active Member of EAO and AO and founder of Firadent & Co since 2004 and the ALL IN ONE DAY concept for immediate loading. Received the EAO certificate of oral implantology in Stockholm in 2015.

Stanislav Vasiliev focuses his private practice on surgery and implant treatment since 2006. He has a special interest in how to manage the formation of the gingival contour around implants in different clinical situations.



Zaur Eristov
Russia



Dmitry Shatarov
Russia



Vitaly Besyakov
Russia



Sergey Edranov
Russia

Zaur Eristov is an oral and maxillofacial surgeon with a main interest in implant treatment since 1991. In his private practice in Moscow, he has focused on immediate implantation in complex and challenging cases with successful outcomes.

Dmitry Shatarov is a surgeon in the National Medical Surgical Center of M.I. Pigorov in Moscow. He has an interest in handling implant placement in challenging situations such as low bone volume.

Vitaly Besyakov is Head doctor of the dental clinic RZD and Assoc. Professor at the Department of Prosthetic Dentistry NSMU and chief dentist at West Siberian Railway. In his work as a prosthodontist he has focused on how to achieve passive fit of framework allowing for installation in one visit with a predictable result.

Sergey Edranov is Professor in Oral & Maxillofacial surgery and the Director of the dental clinic «Dr. Egranov» and Head of the Training Centre. His main focus is soft tissue management for predictable and sustainable results.

Широкое разнообразие систем, методов и подходов в современной имплантологии определяют высокую важность дискуссии по ряду вопросов, на которые приглашённые лектора постараются найти ответы в процессе выступления. Участники пре-конгресса смогут ознакомиться с актуальными решениями в области реабилитации имплантологических пациентов, а также перенять интересные советы и приемы для использования в своей ежедневной клинической практике.



Anne Delisle
Canada



Oliver C. Pin-Harry
Canada



Sébastien Felenc
Canada



Josselin Lethuillier
France



Laurent Sers
France



Julien Muffat-Jeandet
France

The following pre-congress session will be held in French only

L'implantologie numérique pour ceux qui n'aiment pas l'informatique

Anne Delisle received her dental degree from Laval University, Canada, in 1998, and established her clinic in Quebec City (QC), Canada, where she focuses exclusively on oral implantology. Dr. Delisle is a Fellow of the International Congress of Implantology, an Associate Fellow of the American Academy of Implant Dentistry and maintains an active membership in the Academy of Osseointegration and several other professional associations. She has been elected on the PEERS NA in 2014.

Oliver C. Pin-Harry is a Diplomate of the American Board of Prosthodontics as well as Fellow & Examiner of the Royal College of Dentists of Canada. He is the founder and owner of Burlington Prosthodontics, a referral based clinic where he dedicates himself to Dental Implants and Prosthodontics. He is a regularly invited speaker to national and international meetings on implant and esthetic dentistry.

Sébastien Felenc received his degree in Dental Surgery from the University of Montpellier in 1999, and a post-graduate in esthetic and restorative odontology from the University of Montpellier and a post-graduate in implantology from the University of Marseille. A former university hospital assistant, he established and owns his private practice near Montpellier, where he focuses on esthetic dentistry and oral implantology. He has been received as a European Academy of Esthetic Dentistry Affiliate in 2011.

Josselin Lethuillier received his degree in Dental Surgery from the University of Montpellier in 2005, and a post-graduate in periodontology and implantology from the University of Montpellier. A former university hospital assistant, he established and owns his private practice near

Montpellier, where he focuses on esthetic dentistry and oral implantology. He has been received as a European Academy of Esthetic Dentistry Affiliate in 2011.

Laurent Sers received his degree in Dental Surgery and a post-graduate in Oral Implantology from the University of Nice - Sophia-Antipolis, France. A DGOI expert in Oral Implantology, he maintains an active membership in the International Congress of Oral Implantologists, the European Society of Cosmetic Dentistry and the American Academy of Cosmetic Dentistry, among others. He established his clinic in Cannes, France, and lectures extensively on guided surgery and cosmetic dentistry.

Julien Muffat-Jeandet received his degree in Dental Surgery from the University of Nice - Sophia-Antipolis and a post-graduate in Oral Implantology from the University of Aix-Marseille, France. He owns a private practice with a special focus on oral implantology and periodontology in Pau, France, and lectures regularly on implant dentistry.

Le développement de l'informatique médicale a eu une influence capitale sur l'implantologie au cours de la dernière décennie. De la planification implantaire assistée par ordinateur à la réalisation entièrement par CFAO de la restauration finale, la technologie numérique est un incontournable pour tout dentiste en recherche de l'excellence. Mais est-il encore possible d'offrir des soins à la fine pointe de la technologie sans être un véritable « passionné » d'informatique? Essayons de démystifier ce sujet lors de cette session précongrès francophone.

A photograph of a red building facade with a tree in the foreground and a poster for the Musée Matisse. The tree is laden with oranges. The poster is white with black text and a logo. The building has a wooden door and light blue shutters. The text on the poster includes the name of the museum, opening hours, and contact information.

Abstract book

Scientific program and Faculty



MUSÉE MATISSE

HORAIRE:

10h - 18h
Fermé mardi
Fermé dimanche de 10h à 12h
11 mai - 2 décembre

MUSEUM HOURS:

10am - 6pm
Closed Tuesday
Closed Sunday
11 May - 2 December

Plus d'information sur nous



Johan Abeloos
Belgium



Cranial bone grafts used for the reconstruction of severely resorbed upper jaws giving immediate function for implant-supported bridges

Johan Abeloos is head of the department of Oral and Maxillofacial Surgery at St John's Hospital in Bruges, Belgium. His fields of interest are Orthognatic surgery, Head and Neck oncology and Preprosthetic surgery. Special interest goes to immediate loading procedures in atrophied jaws in combination with bone grafting techniques as well as in reconstruction of the masticatory function of Head and Neck patients.

This presentation will demonstrate how patients with severely resorbed upper jaws have been treated with cranial bone grafts and implant supported temporary bridges in one treatment session. The long term results with the definitive fixed bridge will be presented.



Wael Att
Germany

Digital workflow for the rehabilitation of the edentulous jaw

Wael Att is the Director of the Postgraduate Program at the Department of Prosthodontics, Dental School, University of Freiburg. He is a board-certified prosthodontist from the German Society of Prosthodontics and Biomaterials (DGPro) and serves as Past President of the Prosthodontics Group of the International Association for Dental Research (IADR) as well as President of the Arabian Academy of Esthetic Dentistry (ARAED) and President Elect of the International Academy for Digital Dental Medicine (IADDM). Prof. Att graduated in 1997 and received the Dr Med Dent (2003) and PhD (2010) degrees as well as extraordinary professor (2013) from the University of Freiburg.

This presentation aims to provide an overview about the digital workflow for the rehabilitation of the edentulous jaw and discuss different possibilities and advantages when using a digital approach.

Lieven Barbier
Belgium



Cranial bone grafts used for the reconstruction of severely resorbed upper jaws giving immediate function for implant-supported bridges

Lieven Barbier is head of the prosthodontic department at the Training Center for dental students of the KULeuven at the Sint-Jan Hospital Bruges, Belgium. His fields of interest are full-arch immediate loading concepts and the rehabilitation of the hypodontic and oncological patient.

This presentation will demonstrate how patients with severely resorbed upper jaws have been treated with cranial bone grafts and implant supported temporary bridges in one treatment session. The long term results with the definitive fixed bridge will be presented.



Anne Benhamou

France

Member of Scientific Committee Nice

Moderator **Focus on Xive implant system—ease of use for long-term success**

Regeneration in esthetical demanding cases—a biological and clinical approach

Anne Benhamou is teaching in Dental Implant Therapy and Bone and Soft Tissue Reconstruction at Paris VII University, Department of Oral Implantology. She practises in her private clinics in the centre of Paris and London. She is the Fondator and President of the SNIF (Symposium National d'Implantologie au Féminin). Her clinical research emphasises on aesthetic management in Dental Implant Therapy.

Immediate Implant Placement is one of the treatment options in post-extraction sites in the anterior maxilla. For esthetical demanding cases, implant placement must be combined with a simultaneous guided bone regeneration (GBR) procedure to rebuild esthetic facial hard and soft tissue contours. The objectives of the lecture will be to investigate from a biological and clinical approach, the use of biphasic bone substitutes and slow resorbing membranes, to prevent post-extraction bone resorption and support soft tissue healing.

Goran Benic
Switzerland



Esthetic predictability through digital technologies

Goran Benic is Specialist of Reconstructive Dentistry. He is Senior Research and Teaching Assistant at the Center of Dental Medicine, University of Zurich, Switzerland. His clinical focus is on the treatment of complex and esthetic cases using all options of implant and reconstructive dentistry. His major scientific interests include procedures for bone augmentation, fixed tooth- and implant-supported reconstructions and clinical applications of digital technology in implant dentistry.

High outcome predictability is of paramount importance for the treatment of esthetic cases. The introduction of digital technologies has opened a wide range of new diagnostic and therapeutic possibilities. New tools for the analysis and processing of digitalized patient's 3D data enable to simulate the desired end result with respect to prosthodontic reconstruction, to peri-implant bone and to mucosa. Furthermore, the application of rapid prototyping technology has created new opportunities for both diagnostics and communication. Finally, the application of guided surgery and CAD-CAM prosthetics has enhanced the possibilities for improving the treatment predictability in an effective way.



Fred Bergmann
Germany

Multioptional prosthetic solutions for the restoration of the atrophied alveolar ridge

Fred Bergmann, dentist and oral surgeon, is the current president of the German Society of Oral Implantology (DGOI) He got his implantological education at the department for Oral- and Maxillofacial surgery at the university Erlangen-Nuremberg and Mainz in Germany. As leader of the clinic Dr. Bergmann and partner he works in own private practice with a team of 7 dentists limited to oral surgery and Implantology since 1994.

The 3 D diagnostics and a prosthetic driven treatment planning are the basis to create an adequate workflow for fixed or removable solutions. The evaluation of virtual / digital, implant- , augmentation- and prosthetic planning allow a predictable outcome before the therapy starts. On the basis of clinical cases these solutions are described step by step, implementing the features of guided implantation, immediate loading and CAD/CAM based overdentures.

Erierto Bressan
Italy



Advantages of conical abutments to prevent clinical complications in edentulous patients

Erierto Bressan, Professor associate, Chair of Oral Implantology and Periodontology School of Dentistry, University of Padova. Course director, post-graduate program in Methodology and Research in dentistry. Member, Directive Council of IAO. His research interests are in Implantology and Periodontology and include basic research, pathogenetic, diagnostic as well as preventive and therapeutic aspects of peri-implant diseases. He has published several highly-cited articles in the major international, peer-reviewed scientific journals of the dental area.

Dental implants placement have increased in the last ten years; moreover, the prevalence of implant-related complications became an oral health concern, which could be a challenge for the clinicians. The importance of preventing complications must not be underestimated; at the same time the role of implant maintenance is crucial both for clinically healthy and for ailing dental implants. The use of fixed implant supported restoration with conical connection could prevent undesired complications at short and long-term.



Denis Cecchinato

Italy

Member of Scientific Committee Nice

Moderator

Individualized protocols for patient-centered outcomes

Denis Cecchinato, MD, DDS, is the Medical Director of a private clinic in Padova, Italy. He leads a team of talented clinicians who engage their competence and passion to improve patient care. His research activity, especially focused on peri-implantitis and immediate post-extractive implant placement, deal with clinical trials and make his speeches and talks at clinical and scientific events revelatory.

Ernest Cholakis
Canada



Conus Abutment—a new implant supported prosthetic concept for treating edentulous patients

Ernest Cholakis DMD, MBA, a restorative dentist since 1982, and Adjunct Assistant Professor at the University of Manitoba's School of Dentistry is a double recipient of Her Majesty, Queen Elizabeth II, receiving the Golden and Diamond Jubilee Medals. He is the founder of the largest interdisciplinary practice in Manitoba, caring for over 20,000 patients with four separate clinics in a single facility, utilizing a treatment philosophy of integrative care by advancing dentistry as a cooperative science.

This presentation highlights the needs for improved solutions for edentulous patients, a growing group which has been underserved for many years. New techniques and developments can today present the Atlantis Conus Abutment concept, a cost effective solution that provides predictable increase on function, form and esthetics for this group of patients. The concept is built on an implant supported non-resilient prosthesis which is removable but gives stability and perception as being fixed. The key feature is the reliable retention through friction between existing and new innovative patient specific components.



Lyndon Cooper
USA

Teeth for a lifetime

Lyndon Cooper is the Associate Dean for Research, and Head of the department of Oral Biology at the University of Illinois at Chicago (UIC). His research areas deal with osteoblast immune system interactions, and dental implant therapy. His passion is to work in multidisciplinary teams and the mentorships of students and young faculty.

In an era where so much attention is placed on immediate therapies in implant dentistry and product innovation is so rapid, there is little time to step back and ask "what about our future?" Is it possible to provide implant supported "teeth for a lifetime"? This presentation will examine the current knowledge regarding longer term dental implant therapeutic outcomes and suggest emerging challenges and some key opportunities to address improvements in the longevity of implant treatment. Today, in the 4th decade of experience with endosseous dental implant therapy, we acknowledge this responsibility of providing implant-supported "teeth for a lifetime".

Marcus Dagnelid is the chief of staff and CEO at the Dagnelid Clinic in Gothenburg, Sweden and a board certified prosthodontist. His areas of interest are prosthetically driven implant treatments powered by CAD/CAM protocols, aesthetic dentistry on different levels and how to successfully build your practice. The main passion is team-work in dentistry and to constantly strive for better patient care and new ways to gain positive clinical results.

Marcus Dagnelid
Sweden



Modern approaches to proven concepts—CAD/CAM powering surgery and prosthetics

The evolution within digital dentistry and CAD/CAM driven applications is moving rapidly. During the lecture current and future perspectives of the digital restorative processes in terms of treatment planning and end result will be presented. Focus will also be on digital technologies specifically applied to the Astra Tech Implant System EV including; one position, the latest developments within the area of guided surgery, Atlantis individualized abutment solutions, Immediate Smile and SmartFix concept.

Gain success in your practice management and business—customer oriented approaches

Practice management is a topic that becomes increasingly important in a rapidly changing dental market. The patient is now the customer and the referring doctor equally so. During the lecture new ideas and concepts for study clubs and how to grow your business will be highlighted.



Hugo De Bruyn
Belgium
Member of Scientific Committee Nice

NICE benefits of implant treatment beyond survival

Hugo De Bruyn is Full Professor and Chairman of Department and Research cluster Periodontology, Oral Implantology, Removable and Implant Prosthodontics at Ghent University in Belgium, as well as course director of the international periodontology and implantology postgraduate programs. He compassionately leads a research team of master students and specialists aiming to improve patients' quality of life with evidence-based research on immediate implant placement and loading, bone remodeling around various implant surfaces and designs, risk factors, patient-centered outcome and biomaterials.

Tooth loss has a large impact on oral function and aesthetics appearance and dental implants are well-proven solutions to overcome these. This lecture will focus on the impact of tooth loss and dental implant placement on patient-related factors such as well-being, satisfaction and cost-benefits.

José de San José González
Germany



Anterior maxilla—digital treatment concepts for predictable outcomes

José de San José González, MDT, Weinheim, Germany. Apprenticeship in Heidelberg from 1982 to 1986. Since 1986 I worked in different laboratories up to 1999. 1994 acquired the title as master craftsman in dentistry at the chamber of commerce in Karlsruhe. Since 1998 I am the executive vice-president in the committee of the apprentices final examination. I am also working as a lecturer continuously in order to the final examinations at the Master school in Karlsruhe. Since 2003 national and international lectures. Working with Atlantis since 2008. In 1999 I started my own dental laboratory.

Implant treatment of the anterior maxilla is highly demanding due to the specific pre-surgical anatomy and high patient expectations. Precise planning, appropriate surgical knowledge and treatment, as well as a state of the art prosthetic approach, are essential to achieve reliable outcomes in such situations. Recent developments in digital dentistry can help to further improve the outcomes. This lecture will demonstrate different treatment approaches under different pre-surgical conditions and different timelines. To achieve optimum results, the dentist-lab communication is crucial, because both sides are involved at different stages of the treatment with different digital technologies.



Marco Degidi
Italy

Xive implants—mission accomplished—successful results from 2001 to 2016

Marco Degidi is a distinguished oral surgeon, keynote speaker, university professor, and researcher who has published over 130 peer-reviewed articles. His work, research and papers have focused on the development of a number of innovative techniques for implant placement and immediate loading, as well as the role of chairside dental skills in maximizing the benefits of new technologies for implant-supported prostheses.

The idea is to present the premises at the basis of the concept:

1. Primary Stability with all types of bone quality
2. Excellent secondary stability due to the surface
3. Maintaining soft and hard peri-implant tissues in the long-term

Moderator **Focus on**
**Ankylos implant system—science
 and practice for long-term success**
CAD/CAM implant prosthodontics
—the digital race for quality has no finish line

Peter Gehrke
 Germany
 Member of Scientific
 Committee Nice



Peter Gehrke takes an eager interest in his clinical work as implant prosthodontist to pursue a true multidisciplinary approach in benefit of the patient. His research activities focus on restorative implant dentistry, with special emphasis on esthetics and latest developments of CAD/CAM technology.

Implant restorations go digital. The more CAD/CAM solutions are available on the market, the harder it becomes to decide on a system. But there are aspects worth considering. The presentation will describe and differentiate the respective production processes of available CAD/CAM Systems for custom implant abutments and frameworks with regard to precision and surface quality. It will emphasize the natural symbiosis of a functional and esthetic treatment approach, considering novel techniques and their material aspects.



Felix L. Guljé
 Netherlands

Longer preparation for a short implant

Felix L. Guljé is owner of a private clinic of implant dentistry in Apeldoorn and is a research associate at the Groningen University (UMCG) of the Netherlands. His PhD focused on the performance of short 6 mm implants and his passion is to bring science into practice.

In bone volume compromised sites, short implants seems to be a favorable treatment with reliable outcome. Avoiding augmentation has naturally advantages. The consequence is an implant placement on the edge of vital structures and to avoid any loss of bone. You have got to be prepared.

Thomas Hanser
Germany



Avoiding complications in regenerative implantology—the symbiosis between biology and clinical innovations, science and evolutionary materials

Thomas Hanser is a partner of the International Implant Dentistry, Periodontology and Oral Surgery Center at Private Clinic Schloss Schellenstein (Chairman Prof. Dr. F. Khoury), Olsberg, Germany. He is a specialist in Oral Surgery and Master of Science in Periodontology, Master of Science in Implantology and Dental Surgery and Master of Oral Medicine in Implantology, University of Muenster, Germany and a lecturer at several postgraduate academic university programs. His main activities of clinical research are based on long-term stability of esthetic hard and soft tissue enhancement techniques. He is a member of several scientific societies and has been lecturing worldwide on esthetic implant surgery and related hard and soft tissue grafting.

Three-dimensional hard and soft tissue reconstructions of the alveolar ridge are challenging for each surgeon. In order to achieve predictable and long-term results, biological interrelations in the context of regenerative measures and surgical techniques have to be considered. The right combination of hard and soft tissue management plays an important part as well as the ensemble of scientifically proven clinical innovations and materials.



Stefan Hassfeld

Germany

Member of Scientific Committee Nice

Moderator

Digital blueprint—beginning from the end

Stefan Hassfeld is head of the department for craniomaxillofacial surgery at University of Witten/Herdecke. Besides an extensive clinical engagement in complex rehabilitation cases his focus is on diagnostic imaging and planning and simulation of procedures. As president of the German Peers group he is supporting communication in a network of experienced specialists in implantology.

Pablo Hess
Germany



Immediate loading in the edentulous jaw

Pablo Hess is oral surgeon. He is assistant professor at the department of oral surgery and implantology of the Johann Wolfgang Goethe-University of Frankfurt and also partner at the center of oral competence Dres. Kempf & Dr. Hess. His research and passion treats with different loading times as early and immediate loading as well as esthetic results in implant dentistry.

Immediate loading of the edentulous jaw can be achieved either by conventional planning and surgery as well as computer aided diagnostics and manufacturing. From the planning, through the operation to the prosthetic outcome. Experience successful outcomes for both means, from planning to surgery and prosthetic results.



Christoph Hämmerle

Switzerland

Member of Scientific Committee Nice

Moderator [Partnering for health and well-being](#)

Moderator [Outlook on a bright future](#)

[Digital implant dentistry—present and future](#)

Christoph Hämmerle's clinical and research focus is on the comprehensive treatment of complex, partially edentulous patients applying all available options of reconstructive dentistry including implants. He has published numerous scientific articles and has lectured widely internationally on implant dentistry.

For optimal functional and esthetic outcomes initial diagnosis and treatment planning are mandatory. For this purpose patient data are captured including intra- and extra-oral scans as well as 3-D radiographs. Computer aided planning software allows optimal placement of the implants. Thereafter, the digital data obtained are transferred into modern industrialized processes for manufacturing of the final prosthetic reconstruction.

Norbert Jakse
Austria



Preventing failures and complications in augmentative surgery

Norbert Jakse is as Professor in Oral Surgery head of the Division of Oral Surgery and Orthodontics, Department of Dental Medicine and Oral Health, Medical University Graz, Austria. He is an oral-maxillofacial surgeon and distinguished specialist in tissue preservation and regeneration in implant surgery. His passion is excellent patient care and promotion of talented young researchers and clinicians.

During the planning phase important key-factors influence the prognosis of augmentation procedures, matching general and local dental state for individual choice of surgical complexity. Having selected appropriate augmentation techniques limitations of different reconstructive procedures have to be considered. During surgery soft tissue management including save tensionless soft tissue coverage is one prominent pre-requisite of success.



Pierre Keller
France

Clinical experiences with bone regeneration techniques for successful esthetic and functional outcomes

Pierre Keller is an oral surgeon. He works in private practice and is also a clinical instructor in the department of oral surgery at the University of Strasbourg, France. He completed his advanced program in oral surgery under the mentorship of Prof. Fouad Khoury and obtained a Master of Oral Medicine In Implantology from the University of Münster, Germany. He is the current President of the "Société odontologique française d'implantologie." His clinical and research activities focus on bone augmentation procedures and soft tissue management.

An aesthetic and functional implant restoration involves optimal management of hard tissue and different bone regeneration techniques which can be used during or before the implantation. However, bone reconstruction which allows ideal implant placement is not the only key. It is mandatory to obtain sufficient volume of connective tissue and efficient amount of keratinized gingiva through soft tissue management at each stage of treatment.

Fouad Khoury
Germany



Factors influencing long-term success of oral rehabilitation in cases of severe bone loss

Fouad Khoury is Professor at the department of Oral and Craniofacial Surgery of the University of Muenster and Chairman of the Privatklinik Schloss Schellenstein. He is also Chairman of the examination comity for Oral Surgery and board member of the German society of Oral surgery. His research areas deal with Biology of Grafting's Procedures as well as safe procedures for intra oral Bone harvesting. His passion is to develop innovative and biological approaches to improve treatment's results.

Two- and three-dimensional bony defects need for the reconstruction special surgical procedures to assure at long-term an acceptable functional and esthetical result. The long-term success depends on a precise pre-operative diagnostic, atraumatic surgery, the amount of vascularisation and vitality of the grafted area, correct implant geometry and position as well as a systematic soft tissue augmentation improving also the quality of the surrounding gingiva. Autogenous bone grafts harvested from the mandible, and used following the split bone block (SBB) technique are offering many possibilities for intra-operative facilities leading to a high vascular support of the grafted area. Different pedicle or free graft are assuring the required volume of the soft tissue.



Mischa Krebs
Germany

Absolute precision—a prerequisite for single-visit reconstructions and outstanding clinical success

Mischa Krebs is assistant professor in the department of oral surgery and implant dentistry of the Goethe University, Frankfurt, Germany and private practitioner. His research focuses on clinical trials and new digital technologies. His passion is to improve clinical results and patient comfort with new digital workflows.

Minimal invasive, safe, time and cost effective treatment concepts that is what our patients dreamed of concerning reconstructions of missing teeth with dental implants. Thanks to the amazing possible precision of full digital workflows in planning and in guided surgery we have for the very first time in surgery the possibilities to fulfil these dreams. The precise transfer of a virtually planned surgery into the patient allows for prefabrications of patient individual abutments and provisional single-tooth reconstructions. Besides 3D-imaging and planning can help to avoid grafting and reduce patient morbidity. Additionally these concepts are followed by an amazing soft-tissue response which leads to outstanding clinical results - clinical success.

Gerd Körner
Germany



How to succeed in perio-compromised situations with Xive implants

Gerd Körner runs a private office restricted to periodontics, implants and esthetics. As a co-author of two textbooks and as an active member of the EAED (European Academy of Esthetic Dentistry) he is focused on comprehensive dentistry understanding the natural tooth and the implant as congenial partners for esthetic solutions even with periodontally compromised situations.

If you have to place implants in periodontally diseased patients, very often we are confronted with existing or lowering enormous defects combined with danger of compromising perio - implantitis in the years to come. To master this challenge you have to choose adequate implant systems, a tissue conserving and reconstructing treatment concept and especially you should keep an eye on the perio - restorative interface for long-term success. What is possible under these conditions will be highlighted by presenting data of an ongoing 10 - year study on survival and success of Xive implants with formerly periodontally diseased patients.



Jan Lindhe
Sweden

Bone loss around teeth in patients restored with implants

Jan Lindhe is Professor emeritus of Gothenburg University, Sweden. He has published research on etiology and pathogenesis of periodontal disease, effect of treatment procedures, preventive dentistry and implant dentistry.

In this presentation a clinical study will be described that included > 200 partially dentate subjects who had been restored with > 500 implants (Astra Tech® System (Dentsply/Sirona, Mölndal, Sweden). The amount of progressive marginal bone loss that had occurred during a > 5 year interval at implants and teeth in the same segment of the dentition was determined.

In this subjects sample the overall marginal bone loss at teeth and implants was similar. A more detailed analysis, however, documented that in some subjects bone loss occurred at implants while in other subjects bone loss occurred at teeth. In only very few subjects both implants and teeth were exposed to progressive marginal bone loss.

Natasha Lioubavina-Hack
Netherlands



Long-term success of muco-gingival microsurgery around teeth and implants

Natasha Lioubavina-Hack graduated from the Moscow Medical Stomatological Institute, MMSI, in Russia. She completed her training in periodontology and implantology at the university of Aarhus, Denmark. Her main research work and Ph.D.-thesis was devoted to GBR with different types of membranes, bone substitutes and growth factors. Since 2005 she works as periodontist and implantologist in her own private clinic in De Meern, Utrecht. Her passion lies also in esthetic mucogingival periodontal plastic surgery around natural elements and implants.

The aesthetic periodontal muco-gingival surgery is often used to cover gingival recessions. Coronally Advanced Flap or tunneling technique used alone or in combination with connective tissue graft, membranes or regenerative biomaterials can be used to reconstruct various bone defects and to improve soft tissue health and aesthetics around implants. Although these treatments demonstrate good clinical and aesthetic results, the management of delicate soft tissue at the implant site is still a great challenge for a clinician. During the presentation, a new surgical approach of soft tissue management in combination with recent regenerative materials will be discussed, showing improvement in predictability of clinical and aesthetic outcomes.



Christian Mertens
Germany

Anterior maxilla—digital treatment concepts for predictable outcomes

Christian Mertens heads the scientific group Dental Implantology and Bone Augmentation Procedures at the Department of Oral- and Maxillofacial Surgery of the University of Heidelberg. He is senior lecturer and expert for oral surgery. His research and clinical areas are implant surgery, digital dentistry and bone/soft-tissue grafting procedures.

Implant treatment of the anterior maxilla is highly demanding due to the specific pre-surgical anatomy and high patient expectations. Precise planning, appropriate surgical knowledge and treatment, as well as a state of the art prosthetic approach, are essential to achieve reliable outcomes in such situations. Recent developments in digital dentistry can help to further improve the outcomes. This lecture will demonstrate different treatment approaches under different pre-surgical conditions and different timelines. To achieve optimum results, the dentist-lab communication is crucial, because both sides are involved at different stages of the treatment with different digital technologies.

Moderator **Inspiration TALKS—
Precision speaks for itself**

**Evolution of an implant system—a better
understanding of primary stability**

Michael R. Norton, BDS, FDS, RCS(Ed), is an oral surgeon in specialist practice in London and is Adjunct Clinical Professor at the University of Pennsylvania Dental School. He is President Elect of the Academy of Osseointegration (AO) and Past President of the Association of Dental Implantology (ADI), UK. His specialist interests include implant design and immediate loading protocols.

Michael R. Norton
United Kingdom
Member of Scientific
Committee Nice



Primary Stability is not about rotational friction but much more important is axial stability. This lecture will present the Astra Tech EV which has been developed to maximise axial stability utilising the stepped drilling approach to ensure that the implant attains a high initial ISQ. With optional drilling protocols it is possible at the same time to reduce critical pressure to the bone.



Robert Nölken
Germany

**Enhanced tissue support in extraction
sockets and sloped ridges—grafting or
guidance?**

Robert Nölken is an oral surgeon in private practice in Lindau/Lake Constance and Master of Science in periodontology and implant dentistry. Additionally Dr. Nölken serves as senior physician and researcher at the Department of Oral and Maxillofacial Surgery of the University Medicine of Mainz in Germany. His research area deals with innovative implant designs and immediate insertion protocols in the esthetic zone as well as in posterior regions. His passion is to work minimal-invasive under the view of an operation microscope and to improve the esthetic outcome while reducing treatment time and trauma for the patient.

The main objective in modern implant therapy is to maintain and support the peri-implant osseous and soft tissue structures in combination with long-term osseointegration with an esthetic and natural looking peri-implant mucosa. With increasing demands of faster and less invasive protocols immediate loading and immediate implant placement are more in use. This session will present strategies for achieving enhanced soft tissue support on sloped ridges and extraction sockets using a sloped implant design. Long-term results from prospective studies will be presented.

Andrea Parpaiola

Italy



Clinical performance of CAD/CAM abutments

Andrea Parpaiola received his degree in Medicine and Surgery in 1988 from the University of Padova, Italy, and postgraduated in Odontology in 1992. He is teaching at the Master program of Implantology, and is visiting professor at the Department of Periodontology, University of Padova. Dr Parpaiola is active member of several professional societies, and has published several articles in international journals.

The use of cad-cam technology has been established in dentistry, in particular for the fabrication of restorations such as inlays, copings and framework, to support both accuracy of fit and longevity, which either matches or supersedes more conventional techniques. The use of cad-cam in implant dentistry concluded that proof of concept was established for the use of these technologies in the fabrication of both abutments and frameworks. The lecture will address one of the more recent cad-cam systems introduced to the market, the Atlantis system, which offers a multi- platform range of milled abutments for a variety of different implant systems, with focus on the clinical outcomes.



Jan K. Pietruski

Poland

Individualized and streamlined processes for esthetic success

Jan K. Pietruski, DDS, MD, PhD. Founder and president of Polish Academy of Aesthetic Dentistry. He is publishing and teaching focusing on the areas of implant prosthodontics, occlusal disorders and teamwork.

After implant survival a successful esthetic outcome is the most sought after result with dental implant treatment. Today we have quite good understanding about tissue behavior and how biology interacts with the different steps in the treatment process. This lecture will present how individual esthetic demands can be managed and met in a predictable way when well documented implant features are supported with relevant clinical protocols.

Alessandro Ponte
Switzerland



Long-term clinical outcome of complex implant treatment—current and prospective prosthodontic philosophy

Alessandro Ponte is the Head of the department of Oral Surgery at the Private Clinic Sant'Anna in Lugano, Switzerland.

His research areas deal with reconstructive implantology, bone grafting and the integration of surgical and prosthetic digital workflows.

The implant survival rate is nowadays nearly established; nevertheless the tissue and prosthetic parameters that may influence the long-term results concerning the success rate are not precisely defined. Besides the surgical regenerative concepts prosthodontic solutions for better tissue regeneration such as the CAD/CAM technologies, abutment design customization and their future implementation will be presented. Long-term success results after 3-D bone reconstruction between 5 and more than 10 years of prosthetic loading will be illustrated with histologies and statistics based on an objective 2-D and 3-D radiographical analysis.



Marc Quiryen
Belgium

Moderator Focus on Astra Tech Implant System—long-term success and future realities

How to improve the accuracy of guided implant surgery?

Marc Quiryen is Professor at the Faculty of Medicine (Department Periodontology) of the Catholic University of Leuven, Belgium. His research area deals mainly with microbiology, implantology, and the use of L-PRF. He has published over 400 papers in international peer-reviewed journals. He is associate editor of the *Journal of Clinical Periodontology*, and member of the editorial board of *Clinical Oral Implants Research*, *Journal of Dental Research*, *Periodontal Practice Today*, and *Parodontologie*.

The inaccuracy of guided implant surgery is clinically relevant (in angulation ranging from 2° to 11°, at the implant apex ranging from 1 to 3 mm). Part of this deviation already occurs during drilling (5° in angulation, 2 mm at the implant apex). This deviation further depends on: the implant length, the distance between sleeve and bone, the length of the sleeve and/or the sleeve insert, and the discrepancy between drill and insert. The accuracy can be significantly improved by keeping the drill in a centric position within the sleeve insert.

Lars Rasmusson
Sweden



Adipose stem cells tissue-engineered bone for construction of large mandibular defects

Lars Rasmusson graduated from the University of Gothenburg, Sweden, in 1990. In 1998, he defended his PhD thesis "On implant integration in membrane induced and grafted bone" at the Faculty of Medicine at the same university. He simultaneously completed the 5-year training program (SpR) in oral and maxillofacial surgery. In 2001, he became associate professor in biomaterial sciences and in 2002, senior lecturer in maxillofacial surgery. In 2007, he was appointed professor of maxillofacial surgery and since 2008, he is head of the department of oral and maxillofacial surgery, University of Gothenburg.

Large mandibular defects have historically been treated using autogenous bone grafts and reconstruction plates. A major drawback is donor site morbidity. This presentation will describe the replacement of a 6 cm discontinuity mandibular defect using a tissue engineered construct consisting of β -tricalcium phosphate (β -TCP) granulaes, recombinant human BMP-2 and Good Manufacturing Practice-level autologous adipose stem cells (ASCs). The reconstructed defect has successfully been rehabilitated with oral implants.



Fernando Rojas Viscaya
Spain

The Virtual Implant Patient (VIP) protocol

Fernando Rojas-Vizcaya is Adjunct Assistant Professor in the Department of Prosthodontics in the University of North Carolina at Chapel Hill and Director of the Mediterranean Prosthodontic Institute in Castellon, Spain. His working areas deal with restorative and surgical protocols in complex cases, monolithic zirconia restorations and digital solutions. His passion is to develop fully virtual treatment protocols.

The appropriate treatment plan begins with the display of the desired smile, provided by a specific position of the planned teeth, with the correct lip support. A comprehensive treatment plan that incorporate the prosthesis, surgery and biology is the key for the success. The physical, 2D or 3D approaches can be followed for the treatment plan.

Ann-Marie Roos Jansåker
Sweden



Moderator **Creating a sound biological foundation**
How to prevent biological complications

Ann-Marie Roos Jansåker, *Odont.Dr., DDS, Specialist in periodontology, works as a senior consultant in southern Sweden. Her research focuses on infections around dental implants and she is also involved in clinical studies regarding periodontitis and impacted canines. The high figures in the prevalence of peri-implantitis make her worried for the future. Are we prepared to take care of this problem, especially in elderly patients? Patient education, maintenance, early diagnosis and non-surgical and surgical therapy are main topics in her lectures.*

A thorough treatment plan is the key factor to success before implant therapy. The clinician must be aware of the patient's risk factors, insert the implants correctly and also make sure that the reconstruction gives the patient a chance to a proper plaque control. Patient education, regular maintenance and early diagnosis of clinical signs of inflammation are key factors after implant therapy.



Thierry Rouach
France

Treatment of fully edentulous patients with conus abutment—why choose between stability and easy maintenance?

Thierry Rouach graduated in Dentistry from the University of Paris, France. He runs a private practice limited to implant therapy in Paris. His passion is to share and exchange with clinicians and researchers about CAD/CAM dentistry to secure, improve and simplify patient care.

With the aging of the population and the increased request for oral rehabilitation, the treatment of fully edentulous patients by implant-supported restorations is perfectly actual. Many treatment options are available with their advantages and drawbacks. With the digital technology of the Atlantis Conus Concept, we can offer patient specific solution providing the benefits that both fixed and removable solutions have.

Mariano Sanz
Spain



Moderator **The reality of complications**

The maintenance of healthy peri-implant tissues key element in the prevention and treatment of peri-implant diseases

Mariano Sanz is professor of Periodontology at the University Complutense of Madrid, as well as Professor of the University of Oslo. His research areas are clinical trials in Periodontal and regenerative therapies, as well as surgical dental implant protocols. He has published numerous scientific articles as well as lectured internationally.

The long term maintenance of peri-implant tissues have become one of the key elements in the success of implant supported restorations. The maintenance of a healthy peri-implant tissue seal is not only fundamental in the preservation of the aesthetic outcomes, but also in the prevention of peri-implant diseases. The precision in the diagnosis and treatment of mucositis has become the key element in the prevention of periimplantitis.



Nigel A. Saynor
United Kingdom

Contemporary implant concepts—predictable outcomes

Nigel A. Saynor, BDS MSc, General Practitioner, is a general dentist in a specialist referral practice, as well as a Clinical Tutor at the University of Manchester, UK. His main focus for his patients is predictable long-term esthetic outcomes.

The challenges of producing natural restorations that are imperceptible from real teeth is an ever increasing patient demand, which presents the clinician with a series of interesting and often difficult challenges. The principles behind the development of the Ankylos implant system guide us through a minefield of pitfalls to achieve a restoration that you would be happy to have in your own mouth. The lecture will provide indications for treatment modalities using Ankylosophy.

Ashok Sethi
United Kingdom



Esthetic restorations using prefabricated abutments

Ashok Sethi is a registered specialist in Oral Surgery as well as Prosthodontics and is in private practice. He conceived and has run the Diploma in Implant Dentistry at the Royal College of Surgeons of England. He is currently Director of PID – Academy focusing on teaching Practical Implant Dentistry. The second edition of his book “Practical Implant Dentistry – the Science and Art” (co-author Thomas Kaus) has been published by Quintessence.

An appropriate range of prefabricated angled abutments is essential in order to immediately load implants. This presentation will address their use for conventional cement retained metal ceramic restorations as well as the low cost novel rejuvenated concept of conical retention eliminating cement and screws.



Helmut Steveling
Germany

An implant system through the ages— 25 years of clinical success

Helmut Steveling is working with the Astra Tech Implant System since 1992. He is trained in oral surgery as well as in prosthodontics. From 1982 to 2009 he was working at the university hospitals in Würzburg and Heidelberg. Since 2010 he has a private practice near Baden-Baden, Germany.

Over the past decades the indication for implant treatment has changed. In the past the majority of patients asking for implants were edentulous. Today the single tooth replacement using implants is the major indication in many countries. An implant system needs the capacity of adaptation to these different indications as well as the capacity to incorporate new technologies of the dental laboratories. In face of these changes the basic requirements for successful implant treatment remain the stability of the marginal bone level.

Meike Stiesch
Germany



Moderator **Partnering for health and well-being**
**Individualized CAD/CAM abutment—
learning from nature**

Meike Stiesch is Professor at Hannover Medical School, Director of the Department of Prosthetic Dentistry and Biomedical Materials Science and Vice President of the German Society of Prosthodontics and Dental Materials. Her current research focuses on the development of new biomaterial surfaces, analysis of interactions between implants, bacterial biofilms and human tissues, and tissue engineering procedures in the context of dental implantology. Her passion is interdisciplinary research on the development of personalized intelligent implants and the translation of these implant innovations into clinical use to improve patient care.

Implant abutments have a fundamental impact on the long term success of implant rehabilitations. Especially bionic and patient-specific CAD/CAM abutments, which are designed from the natural tooth shape, show optimized functional and esthetic results. This presentation will highlight how progress in CAD/CAM development accompanied by optimized abutment design, material and surface result in enhanced tissue integration and biomechanical loading for overall improved clinical success in dental implantology.



Daniel Thoma
Switzerland

**The right choice of hard- and software
to optimize esthetics**

Daniel Thoma is a Head of Academic Unit. His main scientific interest is related to hard and soft tissue regeneration, whereas clinically, he focuses on the comprehensive treatment of complex, partially edentulous patients applying all available options of reconstructive dentistry including dental implants.

Esthetic and functional demands of patients are increasing. Innovative materials and therapeutic options pave the way to fulfill these needs. Key elements include minimal-invasiveness, low morbidity and highly esthetic outcomes based on an optimal choice of surgical techniques and restorative materials.

Hakan Uysal
Turkey



Technical complications—are they inevitable?

Hakan Uysal is a prosthodontist and co-founder of *Face Project*, a novel interdisciplinary clinic for dental and facial rehabilitation, where he performs implant and restorative dentistry. He has published on dental ceramics and biomechanics of dental implants, and his current clinical interest focus on digital strategies for full arch implant rehabilitations.

Technical complications are inevitable secondary events due to significant effects of oral environment on mechanics of materials. They may disrupt function of implant-abutment-restoration complex, and require providing additional clinical time and effort on an unexpected basis. In this presentation, measures to reduce the incidence of frequent technical complications will be discussed along with the biomechanical risk factors that directly contribute the number and severity of events.



Nele Van Assche
Belgium

Moderator **Life restored—solutions for the fully edentulous patient**

Not only patience results in happy patients

Nele Van Assche is a periodontologist and defended her PhD in 2011, focusing on procedures that could facilitate implant therapy (promoter Prof. M. Quirynen, Belgium). She participated at several consensus conferences as reviewer or presenter. Besides her private practice in Geel, Belgium, where she loves to treat patients who are referred for implant or periodontal treatment, she is active in several scientific committees.

A lot of research is published on quality and accuracies of procedures, technical aspects, materials to be predictable and successful. Of course these factors play a very important role, but the impact of human factors may not be underestimated to be successful and get patients happy. The feeling of being happy could be completely different for the patient and for the practitioner, within the same treatment. Clinicians should be continuously aware of different aspects to be successful when treating patients, starting from the first consultation towards the long term follow up. This lecture will share science and the 10 years' experience in own private practice.

Moderator **Treatment success with the patient in focus**

Implant therapy and the virtual patient—safer and faster final outcome in reality

Paul Weigl
Germany



***Paul Weigl** graduated from the University of Munich Dental School in 1989. Since 1992 he has worked as an assistant professor and director of preclinical studies for the Department of Prosthodontics of the Johann Wolfgang Goethe-University Frankfurt am Main. Dr. Weigl has special focus in the field of prosthetics on implants. He is also a senior specialist at the Department of Prosthodontics, University of Frankfurt. Additionally he runs R&D projects to develop an effective and minimally invasive therapy concept for predictable esthetic results. Since four years he runs as a head the Department of Postgraduate Education.*

Today's medical imaging techniques allow for an excellent 3D representation of oral tissues and generate a so-called virtual patient. Not only the ideal implant position can be planned, but the entire treatment can be simulated with the appropriate software—with the future use of virtual glasses, too. The therapy performed on the real patient is safer and, due to the pre-produced patient specific components (abutment/crown & bridge) faster than conventionally free-hand placed and subsequently by an impression recorded implants. This will lead to the final breakthrough in implantology—replacing any lost tooth with an implant with a crown.



Stijn Vervaeke
Belgium

Post-extraction volumetric changes of the alveolar ridge—natural healing versus preservation techniques

***Stijn Vervaeke** is Assistant Professor and Adjunct Head of Clinic at the department of Periodontology and Oral Implantology at Ghent University, Belgium, where he is responsible for the advanced implantology program for specialists in training. His research focus is on long-term soft tissue and crestal bone stability and innovative treatment protocols.*

It is well-known that important changes occur after tooth extraction. These changes might hamper optimal esthetic outcomes when dental implants are placed. The aim of the present lecture is to focus on predictors for advanced ridge resorption and techniques to minimize this process.

Orcan Yüksel
Germany



Professional teams and hardware—complex case success is not a coincidence

Orcan Yüksel is the owner of a dental clinic and education center, specialized in dental esthetics and oral implantology. He is a certified by the European Association of Dental Implantology (BDIZ/EDI) and Diplomate of ICOI, as well as guest lecturer in the certified Curriculum Program of Oral Implantology and accredited supervisor in Master of Oral Implantology at Frankfurt University, Germany. Together with B. Giesenhagen, he developed the bonering technique.

Complex implant cases should be performed with more effort to achieve perfect results. The aim is to reduce treatment/ chair-side time and still reach a good result. We need to maintain bone and soft tissue in the grafted sites during the functional loading time. Both, good techniques and a trustworthy implant design are major keys for success.

The image is an abstract book cover. It features a dark, almost black background. In the foreground, there are several teal-colored, stylized human figures. These figures are rendered in a way that makes them look like they are made of a soft, glowing material. They are surrounded by a dense field of small, sparkling particles that catch the light, creating a shimmering effect. The overall composition is dynamic and visually striking, with a strong contrast between the dark background and the bright teal and white elements.

Abstract book
Poster Competition

RESEARCH CATEGORY

FRA-001

Computer-assisted surgery and intraoral welding technique for immediate full-arch restorations of implants inserted in fresh extraction sockets: A 1 year follow-up study

A M Albiero*, A Benato, R Benato

Background: Complications are frequently reported when combining computer guided flapless surgery with an immediate loaded prefabricated prosthesis. The aim of this retrospective study is to evaluate accuracy and 1-year follow-up outcomes of computer-guided implants inserted in fresh extraction sockets and immediately loaded using an intraoral welded full arch prosthesis.

Material and Methods: Sixty Ankylos plus® implants (Dentsply Sirona Implants, Mannheim, Germany) of 3.5 width and 8 to 14 mm length were installed consecutively in 10 patients with ExpertEase™ guided surgery (6 in healed and 54 in post extractive sites). Virtual surgical planning and titanium bar previsualization inside the future prosthetic plan were performed using Simplant® software. Implants were functionally loaded using the intraoral welding technique on the day of surgery (WeldOne™ Concept). The precision was assessed by matching the planning cone-beam computed tomography (CBCT) with a post-operative CBCT. Restoration success and survival, implant success, and biologic or technical

complications were assessed immediately after surgery and at 6 and 12 months.

Results: No mechanical or biological complications were registered at 1-year follow-up. The global coronal deviation ranged between 0.25 mm and 2.84 mm (SD: 0.6 mm), with a mean of 1.28 mm. Average angle deviation was 3.42° (range 0.38–7.82°; SD: 1.52°). The global apical deviation ranged between 0.36 mm and 3.85 mm (SD: 0.71 mm), with a mean of 1.65 mm.

Discussion and/ or Conclusion: The present study is the first to investigate the accuracy of computer-guided flapless implants inserted in fresh extraction sockets. Despite the inaccuracy registered the guided-welded approach allowed to successfully achieve a passive fit of the full-arch prosthesis on the inserted implants the same day of the surgery providing a high implant and prosthetic survival rate at 1-year follow-up.

**Presenting author*

FRA-002

Influence of implant number, implant length and crown height on bone stress distribution for three-unit bridges in the posterior mandible: A 3D finite element analysis

N Cavalli*, G Casaroli, S Corbella, G Pellegrini, S Taschieri, F Galbusera, T Villa, L Francetti

Background: Short dental implants showed satisfactory short and medium term survival rates. However higher crowns are sometimes necessary to compensate bone resorption, leading to a disadvantageous crown-to-implant ratio.

Material and Methods: The tridimensional shape of the edentulous half mandible was reconstructed from CT scans. The meshes of the implants (Astra Tech Implant System OsseoSpeed TX) were placed from second premolar to second molar position. Six different implant configurations were compared. Four with 8 mm long crowns: LS2) two 11 mm long implants; LS3) three 11 mm long implants; SS2) two 11 mm long implants; SS3) three 11 mm long implants. Two with 13 mm long crowns: SL2) two 6 mm long implants; SL3) three 6 mm long implants. A superstructure representing a porcelain three-unit bridge was built using beam elements. A 200 N axial and 45° oblique loads were applied to each crown. For each configuration the effect of both loading scenarios was evaluated in terms of state of stress in the bone-implant interface.

Results: Under oblique load the stress distribution is more concentrated around the cervical part of implants and is up to 35 times higher than under axial load. The maximum stress was observed in SL2 while the minimum in LC3. The increase of stress parameters values in SS configurations respect to LS configurations were on average the 40%. The average increase of stress values in SL configurations respect to SS configurations was the 42%. Configurations with 2-implants underwent about the 50% more stress on average than the respective 3-implants configurations.

Discussion and/ or Conclusion: Crown height, implant number and implant length seem to be all influencing factors on implant bone stress. However the augmentation of crown height seems to have a greater effect than the reduction of implant length, even if the stress was always observed within a physiological range. follow-up.

**Presenting author*

FRA-003

Intra-oral radiography lacks accuracy for the assessment of peri-implant bone level—A prospective study

V Christiaens*, R Jacobs, M Dierens, S Vervaeke, H De Bruyn, K Sebastiaan, J Cosyn

Background: The accuracy of intra-oral radiographs in assessing peri-implant interproximal bone level is poorly documented. The aim of this study was to compare clinical and radiographic bone level assessment to intra-surgical bone level registration around implants with peri-implantitis (1) and to identify the clinical variables rendering peri-implant bone level assessment inaccurate (2).

Material and Methods: The study sample included 50 implants with peri-implantitis in 23 patients. Registration methods included pocket probing, intra-oral radiography and bone sounding without and with flap elevation. The latter was considered the true bone level (gold standard). Twenty clinicians evaluated all radiographs.

Results: Pocket probing and intra-oral radiography resulted in a significant underestimation of the true bone level by 1.0 mm ($p < 0.001$) and 2.3 mm

($p \leq 0.013$), respectively. Bone sounding without flap elevation did not differ significantly from the true bone level ($p = 0.429$). Radiographic underestimation was significantly affected by defect depth ($p < 0.001$). Variation amongst clinicians was huge (range: 1.1–3.8 mm); however, clinical experience had no impact on radiographic underestimation ($p > 0.796$).

Discussion and/ or Conclusion: Bone sounding without flap elevation was the best predictor of peri-implant bone level, whereas intra-oral radiography was the worst. Consequently, peri-implantitis may be underdiagnosed if examination is only based on radiographs.

**Presenting author*

FRA-004

White ceramized implants and abutments to optimize the aesthetic outcome and improvement of hard and soft tissue management: An in vitro-study

D Grubeanu*, P Hartjen, H Hanken, A Kopp, M Heiland, O Jung, R Smeets

Background: The implantological restoration of deficient teeth represents a now routine engagement with high success rates. Thereby, dentures usually consist of three parts: implant, abutment and crown. Especially within the anterior region, abutments, as a transition to the visible crown, can become visible. This circumstance normally leads to insufficient esthetic results. Aiming to antagonize this disadvantage, the innovative coating technology plasma electrolytic oxidation (PEO) can produce thick ceramics coating that mimic the natural teeth whitening. The following study describes the manufacturing process, feasibility and initial cell tests regarding cytocompatibility and soft-tissue attachment testing of the new coatings.

Material and Methods: After manufacturing, the transition of the abutments were ceramized by PEO. Surface analysis was achieved by means of SEM / EDX and profilometry. The ceramic layer and the abutments themselves were tested in accordance with DIN ISO 10993-5 / -12 for cytocompatibility.

The adherence of fibroblasts was evaluated by Live-Dead staining. Mechanical analysis of coating hardness was performed using indentation and scratch tests.

Results: The visible transitions of the abutments were successfully ceramized representing a whitish surface. The layer itself showed a rough and porous surface under the microscope. A discoloration of the surface could not be detected after repeated immersion tests in heparinized blood. Besides cytocompatibility, the adherence of fibroblasts of both PEO specimens and uncoated titanium test samples was equivalent.

Discussion and/ or Conclusion: The white ceramic layer manufactured by PEO can increase the overall esthetic appearance of abutments in the anterior teeth region. The layer itself was resistible to discoloration and showed promising cytocompatibility and cell adherence of fibroblasts.

**Presenting author*

FRA-005

Bisphosphonates and sinus lift: Compatibility?

C Leverd*, O Leclercq, S Delplace, G Penel, F Boschin

Background: The use of bisphosphonates in our patients represents an important therapeutic issue when implant-supported rehabilitation is required. Implant placement is well codified in this type of patient, however there is very little literature regarding sinus floor elevation.

Material and Methods: We present the case of a 65-year-old patient whose history is mainly marked by osteoarthritis and osteoporosis treated by Risedronate between 2010 and 2012. After clinical and radiographic examination, the avulsions teeth are realized in an initial stage in order to evaluate the healing our patient.

Long-term clinical and radiographic control allowed us to conclude that the periodontal tissues were well healed. He is therefore proposed a complete maxillary rehabilitation on 6 implants after sinus floor elevation. A histological analysis of the sinus sites was performed in this patient, one year after sub-sinus bone reconstruction to evaluate healing and bone maturation.

Results: The histological sections stained with the blue of toluidine realized show an osteoblastic activity in contact with the grains of biomaterials as well as the presence of a mature bone surrounding the xenograft. These results were confirmed by a picro-sirius red staining which made it possible to demonstrate the numerous collagen fibers present. This led to the conclusion that there was good healing and mineralization of the bone tissue.

Discussion and/ or Conclusion: A precise evaluation of the clinical situation must therefore be systematically carried out, centered on the healing potential of the patient and on the co-morbidity factors associated with the taking of bisphosphonates. Beyond the indication itself, questions remain about the treatment modalities and changes in bone healing (positive or negative) brought about by taking bisphosphonates impacting the prognosis of long-term rehabilitation.

**Presenting author*

FRA-006

CAD-CAM implant abutments: Peri-implant hard and soft tissues response after a follow-up of 4 years

D Lops*

Background: The aim of the present study was to evaluate the prognosis of CAD-CAM implant abutments and the respective peri-implant soft tissues response.

Material and Methods: The clinical trial was designed as a multicenter study. Adults in need of one or more implants replacing teeth to be removed in the maxilla and mandible within the premolar region were recruited. Only implants restored by means of CAD-CAM abutments were selected. Zirconia, Titanium and Gold-Hue titanium abutments were included. Fixed single crowns (117) and partial dentures (102) were fabricated. Each patient was followed for 2 years at least after the definitive prosthesis installation. Clinical (PI, Plaque index, BoP, Bleeding on Probing Index, and Papilla Index) and radiographical (MBL, Marginal Bone Level) parameters were assessed at the yearly follow-up visit. Moreover, prosthetic complications were recorded. Statistical analysis was used to compare any difference in biological and radiographical parameters between different CAD-CAM abutments. Descriptive statistics were used to analyze the changes over time of clinical

and radiographical parameters from baseline to the last follow-up.

Results: A total of 123 patients were included into the measurements sample. 54 implants supporting ZZ zirconia, 178 titanium and 59 Gold-Hue titanium abutments completed the follow-up examination. No implant, reconstruction, and abutment failure were recorded: therefore, the prosthetic survival after 4-years of function was 100% for all the abutments and restorations. No significant differences in biological and radiographical indexes were found between different abutments when compared each other and from baseline to the last follow-up examination.

Discussion and/ or Conclusion: The short-term survival of CAD-CAM abutments was reliable no matter of the material used for the manufacturing. Nevertheless, long-term evaluations are needed to confirm this finding.

**Presenting author*

FRA-007

The influence of impression material on the accuracy of the master cast in implant restorations

S Stefos*, P Zoidis, A Sarafianou, S Kourtis

Background: This study examined the effect of two different impression materials on the accuracy of the master cast with parallel and inclined implants.

Material and Methods: A master cast was fabricated in epoxy resin with three Xive TG implants embedded. Five closed-tray impressions were prepared with medium-viscosity polyether and five other with medium-viscosity silicone. Two light-cured custom acrylic trays were fabricated for each impression material and transfer copings were fixed on the implants. Subsequently, the ten impressions were poured in type IV die stone. The first two implants were parallel to each other (Implants A, B) and perpendicular to the horizontal level and the third implant (Implant C) had a 250 inclination to the other two. The metal framework that was constructed in the master cast was fixed to the new specimens and the micro-gap between this prosthesis and the implant analogs was evaluated. The specimens were observed to an optical microscope from which photos were taken and analyzed using a computer software.

Results: The obtained data of the micro-gap values were statistically evaluated using ANOVA and Categorical Regression analysis.

Discussion and/ or Conclusion: Within the limitations of this study, it can be concluded that:

- 1) The marginal gap between the implant surface and the prosthesis is affected mainly by the impression material, the implant angulation or their interaction.
- 2) The marginal gaps were greater when medium-viscosity polyether was used as an impression material, than of those gaps when medium-viscosity addition silicone was used.
- 3) Angulated implants: the master casts that were poured from the medium-viscosity addition silicone impressions were more accurate, especially when short transfer copings were used.
- 4) Parallel implants: their master casts were more accurate, when short transfer copings were used.
- 5) Medium-viscosity addition silicone used as the impression material combined with short transfer copings produced more accurate master casts.

**Presenting author*

FRA-008

Sinus lift without graft material: Stability of the increased bone volume (1 to 6 years follow-up study)

N Strube*

Background: Implant-supported prosthetic restorations in the severely atrophic posterior maxilla have been successfully performed for the last 2 decades with various sinus augmentation techniques. The use of grafting material is widespread practice (Jensen et al. 1996) but studies (Lundgren 2004, Thor 2007, Fermergard 2009, Cricchio 2011, Volpe 2011 Riben 2012, Si 2013, Altintas 2013) have demonstrated that the elevation of the Schneiderian membrane with simultaneous implants placement result in bone formation. Objectives of the study was to evaluate the stability of the increased bone volume around implants inserted in a void space created by the elevation of the sinus membrane without adding any bone grafting material.

Material and Methods: 98 Astra Tech implants with a residual bone height requiring a sinus lift were placed from January 2009 to September 2015. The sinus mucosal lining was elevated implants were installed in the residual bone without adding any bone grafting material. Radiographs were performed to evaluate bone formation and the stability of bone volume around implants.

Results: All implants were functional after 6 months. Radiographic examination demonstrated new bone formation in 97.8 % of the cases after 6 months. Average bone gain in the sinus was 5.81 mm +/- 2.22 mm after a minimum of 6 months. Bone gain volume remains stable even for implants placed there for 6 years (98.4 %).

Discussion and/ or Conclusion: Our investigation shows that sinus membrane elevation and simultaneous implant placement without the use of additional bone grafting material is a predictable technique for bone augmentation of the maxillary sinus. According to the study, we assume that bone gain volume remains stable. The healing potential of this new living bone seems simplify the management in case of peri-implantitis. Further human long-term studies on the stability of the bone volume are needed to confirm these findings.

**Presenting author*

FRA-009

Vertical implant position in relation with soft tissue thickness: prevention of early implant surface exposure. A 2 year prospective split-mouth study.

S Vervaeke*, C Matthys, R Doornewaard, J Cosyn, H De Bruyn

Background: A recent systematic concluded that there is insufficient evidence to determine the effect of soft-tissue thickness on crestal bone loss (Akcali et al. 2016). Hence, the aim of this study is to evaluate this effect and to investigate if implant surface exposure can be avoided by adapting the vertical implant position in relation with soft tissue thickness.

Material and Methods: Twenty-five edentulous patients were treated with two non-splinted implants supporting an overdenture in the mandible. Soft tissue thickness was measured pre-surgically using bone sounding and ultrasonically. One implant was installed equicrestally. The vertical position of the second implant was adapted to the soft tissue thickness. Plaque/bleeding scores and probing pockets depths were recorded after 6 months, 1 year and 2 years. Crestal bone levels were determined on digital peri-apical radiographs and compared with baseline (implant placement).

Results: A mean pre-surgical soft tissue thickness of 1.93 mm and 1.98 mm was observed, using bone sounding and ultrasonic measurements, respectively.

A strong correlation was observed between both techniques ($r=0.86$; $p<0.001$). No implants failed, resulting in a survival rate of 100%. Plaque and bleeding scores were low and remained stable during follow-up. Subcrestal implants showed significantly better bone levels after 6 months (0.04 mm vs 0.72 mm; $p<0.001$), 1-year (0.03 mm vs 0.77 mm; $p<0.001$) and 2-year follow-up (0.04 mm vs 0.73 mm; $p<0.001$) compared with equicrestal implants.

Discussion and/ or Conclusion: Within the limits of this study, it can be concluded that initial bone remodeling is affected by soft tissue thickness. However, anticipating biologic width re-establishment by adapting the vertical position of the implant, seemed highly successful to avoid early exposure of the implant surface.

**Presenting author*

FRA-010

Dimensional changes of the alveolar bone 4 months post-extraction: Preliminary results of a randomized controlled clinical trial comparing ridge preservation with natural healing

S Vervaeke*, G De Moyer, G Hommez, S Vandeweghe, H De Bruyn

Background: The biologic process of alveolar ridge resorption following tooth extraction jeopardizes esthetic treatment outcome. Hence, ridge preservation techniques are often required to minimize buccal contour loss. The aim of this prospective RCT is to evaluate the 4-month dimensional changes in natural healing compared with ridge preservation.

Material and Methods: Patients in need for tooth replacement in the anterior maxilla or mandible were randomly assigned to 3 different treatment groups: A) natural healing, B) coverage with a Symbios SR collagen membrane, C) coverage with a Symbios SR collagen membrane + Symbios biphasic bone graft (Dentsply Sirona, Mölndal, Sweden). CBCT's were taken immediately after tooth extraction (T1) and after 4 months healing (T4). Images were superimposed using OnDemand-3D software (Cybermed, Daejeon, Korea) to compare dimensional bone changes on the midfacial level of each socket. Surface changes were calculated for the crestal 3 mm and 5 mm of the socket (Figure).

Results: Twenty patients (7 females, 13 males; mean age = 50.79, SD 13.95) with 24 sockets were randomly assigned to treatment groups. Each group consisted of 8 sockets. The study sample included 2 incisors, 5 canines and 13 premolars in the maxilla and 4 premolars in the mandible. After 4 months, group A showed a midfacial dimensional loss of 48.03 % (SD 31.10) and 38.79 % (SD 25.57) for the crestal 3 mm and 5 mm, respectively. 45.92 % (SD 32.80) and 33.87 % (SD 37.77) were the corresponding values for group B; 32.72 % (SD 30.80) and 26.77 % (SD 24.19) for group C.

Discussion and/ or Conclusion: Preliminary results suggest a beneficial effect in terms of contour preservation when Symbios Biphasic graft is used in combination with a collagen membrane. However, at this stage, it is difficult to draw conclusions based on a limited sample size.

**Presenting author*

CLINICAL APPLICATION

FRA-011

Accuracy of cost efficient chairside teeth supported implant guide: Cerec guide 2.0

M Ahonen*, K Ahonen

Background: Placement of dental implants are highly precise procedure which not only need to take consideration quantity and quality of bone and soft tissues but also location of future crown. High costs and inaccuracy of implant guides have been reason which most implants are placed freehanded. Computer-aided design and computer-assisted manufacturing improves the fabrication of surgical guides by reducing manual labor and simplifying the process.

Material and Methods: Fifty patients with partially edentulous jaws were included in this study. Cerec Omnicam was used to take intraoral digital impression and to design prosthetically driven crown. Cone beam computed tomography images of the underlying bone were superimposed with crown design and optimal implant placement was planned. Surgical guide was designed and milled chairside from acrylic block. Osteotomy was fully guided and all implants were placed by a single operator. Positional information of placed implant was scanned with Cerec Omnicam. Acquired precision digital impression was

superimposed with original implant guide planning in Galaxis software. The accuracy of the guided surgery system was evaluated at fixture level. The outcome parameters were horizontal, vertical and angular deviation. Mean values and standard deviations were calculated using the centerlines of the fixtures.

Results: The means and standard horizontal deviations of implant neck were 0.25 ± 0.17 mm and on implant apex 0.55 ± 0.39 mm. Error in depth were 0.56 ± 0.32 mm accordingly.

Discussion and/ or Conclusion: The data of this clinical study demonstrate highly accurate implant guide which can be used practically in any clinical situation without drastically increasing costs to patient. Digital impression, implant planning and Cerec guide design can be done in less than 30 minutes. Total cost for materials are 50 euros and guide is milled chairside in 30-45 minutes.

**Presenting author*

FRA-012

Implant placement and hard tissue regeneration in case of oligodontia and following orthodontic therapy

V Christiaens*, S Vervaeke, S Vandeweghe, H De Bruyn

Background: Tooth agenesis is one of the most prevalent craniofacial congenital disorders. Oligodontia can be related to a syndrome or can be presented as an isolated condition. The prevalence in permanent dentition is 0.14%. The objective of this article is to report oral rehabilitation with implants and hard tissue regeneration in a patient with an agenesis of 15 permanent teeth and following orthodontics.

Material and Methods: A Caucasian 23-year old man, was referred to the Ghent University Hospital, Department of Periodontology and Oral Implantology. Chief complaints were functional and esthetic problems, related to oligodontia. In preparation of implants at a later age, an orthodontic treatment was initiated at the age of 15. In addition, upper third molars were transplanted to the position 35 and 45. After the orthodontic treatment a CBCT was taken for a detailed surgical treatment plan. Based on this CBCT, the further treatment plan for implant placement was made. The concave and knifed edged bone in the upper jaw and the limited bone quality and quantity in the lower jaw suggested the need for bone augmentation.

Results: The selected materials in this case were 7 Astra Tech Implant System EV implants (Dentsply Sirona) and Bio-Oss and Bio-Guide (Geistlich) for the hard tissue regeneration. Related to the low bone quality and the hard tissue regeneration a second stage surgery was scheduled 6 months after implant placement. Two weeks after this minimal invasive surgery, prosthodontic therapy was initiated. First, open-tray impressions were made to manufacture provisional, screw-retained crowns. The shape of the provisional restorations was adjusted by adding composite, thereby putting pressure on the mucosa and optimizing the pink esthetics.

Discussion and/ or Conclusion: Treatment of oligodontia patients with dental implants is difficult because of reduced height, width and quality of the alveolar bone. This report demonstrates that a proper multidisciplinary treatment plan can offer a predictable solution for complex cases.

**Presenting author*

FRA-013

The influence of different levels of insertion torque on bone loss: A 5-year radiographic retrospective study

G Daprile*, M Degidi, A Piattelli

Background: Nowadays implants are able to achieve very good primary stability, nevertheless some papers reported data about pronounced bone resorption in implants inserted with high level of insertion torque. The aim of this retrospective study was to determine bone loss over a 5-year period in a sample of implants inserted with different values of peak insertion torque.

Material and Methods: The population was represented by all patients who received one or more implants during the period between January 2009 and December 2010. All the patients had to present intraoral radiographs, routinely taken immediately after implant insertion (T0), after 6 months (T1) and after 5 years (T2). Furthermore, each subject had to present in his medical record implants peak Insertion Torque (IT) value expressed in Ncm and recorded at the moment of implant insertion. According to peak insertion torque, three different implant groups were created: implants placed with low (0-25 Ncm), medium (25.1-50 Ncm) and high (50.1-90 Ncm)

torque. The final population comprised of 115 subjects with a total of 430 implants: 123 with high, 187 with medium and 120 with low torque.

Results: The mean marginal bone loss between T0 and T1 was 0.86 ± 0.95 mm in low IT, 0.87 ± 0.90 mm in medium IT and 0.76 ± 1.05 mm in high IT group. The mean marginal bone loss between T1 and T2 was 0.49 ± 0.79 mm in low IT, 0.56 ± 0.80 mm in medium IT and 0.38 ± 0.90 mm in high IT group. No statistically significant differences were found between mean values. Spearman analysis did not show any statistically significant correlation between IT values and marginal bone loss.

Discussion and/ or Conclusion: Different levels of IT don't seem to affect either bone remodeling after implant insertion nor marginal bone resorption after 5 years.

**Presenting author*

FRA-014

Vertical bone graft and switching platform: A case report

R Doliveux*, P Keeve

Background: Bone grafting procedures in the vertical dimension remains nowadays very challenging and autogenous bone graft is still the gold standard. The stability of this bone over the years is of course influenced by the prosthetic.

Material and Methods: A 24 years old female, with a history of trauma presented a failure of an immediate implantation treatment. At the day of our consultation, the situation was an atrophic soft tissue with a lot of scare tissues and a huge bone defect. Retromolar autogenous bone blocs were harvested intraorally with the Microsaw (Symbios, Dentsply Sirona). This bone bloc was divided in thin blocs, according to the “Split Bone Bloc Technique” developed by F. Khoury. The contour of the new crest was rebuilt with thin cortical bone plates fixated with Microscrews (Stoma). Within this autogenous boxing, bone chips, scraped on the retromolar bone bloc were grafted. After 3 months of healing, two Xive S plus implants 3.8 x 13 mm (Dentsply Sirona) were placed, and a Kazanjian plastic realized to correct the vestibulum and create fixed

gingiva. At that time, 3,4 PS cover screws (Platform switching Xive S Plus cover screw, Dentsply Sirona) were installed on the implants. Following a provisional prosthetic phase, it was possible to achieve a screw retained bridge restoration on two Xive MP abutments PS. Those one allowed a nice switching platform situation for the implants placed in 15 mm high vertically grafted bone.

Results: A 15 mm high bone reconstruction was successfully completed thanks to the properties of autogenous bone. An adapted soft tissue management allowed the establishment of stable vestibule and attached gingiva.

Discussion and/ or Conclusion: Switching platform abutments are certainly involved in the stability of vertical grafted bone around implants. Further studies are necessary to underline their role in vertical grafted bone stability.

**Presenting author*

FRA-015

Rehabilitation of maxillary edentulism with hybrid prosthetic solution: A case report

O Erslan*, E B Gül Aygün, C Aktaş

Background: Hybrid prosthesis are a way to replace missing teeth and periodontal tissues. When there is a considerable amount of bone loss on jaws, detachable implant supported prosthesis are the best solution. Because they are cross between removable dentures and fixed implant retained prosthesis. They are combined with metal substructure covered with acrylic resin. This clinical report has documented the esthetic and functional rehabilitation of the patient with implant supported hybrid prosthesis.

Material and Methods: 58 year old male patient with maxillary total and mandibular partial edentulism, had attended to our clinic to compensate the esthetic and functional demands. When he applied to our clinic; 3.6 diameter 6 Astra Tech implants have already been placed to patient's maxilla. Renewing of patient's old conventional tooth retained fixed prosthesis has been considered for rehabilitation of mandible. To determine which type of rehabilitation we were going to choose for maxilla, some measurements and evaluations has been made. Because of the space within the maxillary crest and mandibular occlusion line more than 15 mm

and insufficient lip support we weren't be able to rehabilitate the edentulism with Misch classification's FP-2 type prosthesis. Uni-abutments were placed and impressions were taken with open tray technique. During the try-in procedures of the substructure, the passive-fit was ensured. In order to obtain the tissue support, the vestibular flange of the prosthesis had been constructed thick.

Results: There have been no subjective and objective symptoms around the implants at the radiographic and clinical inspections. The patient is extremely satisfied with the esthetic and functional outcome of the treatment.

Discussion and/ or Conclusion: Hybrid prosthesis can replace both teeth and dental supportive tissues and are easy to provide hygiene compared to other prosthetic solutions. It was concluded that this type of prosthetic solution can provide more satisfactory results.

**Presenting author*

FRA-016

Additive manufacturing of a cobalt-chromium framework

I Frank*

Background: A “future-oriented production technique” is “3D printing”, more precisely “additive manufacturing” (AM). This generative process allows for a “design-driven manufacturing process” in which the design has virtually no restriction by production parameters.

Material and Methods: After the unexpected death of his practitioner, a 55-year-old patient – in the mandible with chairside-manufactured immediate loading on six implants – looked for the authors’ practice to complete the treatment.

The implants of the Astra Tech Implant System (OsseoSpeed TX) had been placed in 36, 34, 32, 42, 44, and 46. The fabrication of the framework, designed by the Atlantis Design center, took only a few days, with the suprastructure already sandblasted. Intraorally and on a new master model, the CoCr framework showed with the Sheffield test no misalignment. For the veneering with veneer shells and composite, the framework was prepared as usual and conditioned with metal primer. The screw bearings for the prosthetic screws had also already

been milled so the final restoration could be screwed to the abutments without further work.

Results: Care of all implants with UniAbutments 20° and preparation of a 12-membered cobalt-chromium implant bridge, veneered with composite and veneer shells and minimal application of red gingiva.

Discussion and/ or Conclusion: Since all six implants had diverging axes, a skeleton construction with angled screw extensions was necessary for functional and aesthetic reasons. Such a construction requires an extremely high passive fit and a corresponding surface quality and structure in order to ensure a reliable function and a long-term stable material combination. With the additive method, extremely precise (up to 15 µm), very complex and filigree superstructures can be produced with an extremely high material density. With appropriate production technology, Additive Manufacturing (AM) in the production of NEM framework made of cobalt-chromium is preferable to existing manufacturing methods.

**Presenting author*

FRA-017

Immediate implant case based in protocol

J Frieyro*, A Villavigil

Background: Patient with cracked tooth, number 14 with root canal treatment, the patient with marked pain on biting, inflammation and isolated deep probing more than 9 mm. The treatment was immediate implant placement with alveolar bone augmentation on socket preservation following atraumatic tooth extraction. The patient was in good general health, with no contraindications for implant therapy.

Material and Methods: CBCT scans were made, this CBCT showed the apical bone more than 4 mm perfect for the immediate implant.

Results: The tooth was extracted with minimal trauma, the implant was 4x17 OsseoSpeed TX with insertion torque of approximately more than 40 Ncm. The implant position palatal to the buccal defect and sufficient buccal room for grafting material. Bone matrix next to the implant and Bioss, collagen and connective tissue from the palatal. Immediate prosthetic treatment and definitive prosthetic in 3 months.

**Presenting author*

FRA-018

Narrow diameter implant: Literature review and 5-years retrospective study

A Goeminne*

Background: Numerous studies have been published concerning narrow-diameter implants (NI) in order to define indications, rates of success and survival and their results in general. However, there is still considerable vagueness regarding their definition, the type of prosthesis indicated and the criteria defining the success rate. The aim of this study was to validate the hypothesis that NI would represent a predictable alternative with satisfactory results similar to those of standard-size implants including in the posterior area. Our results have been also compared with those published in the international literature.

Material and Methods: Twenty three patients, with mean age of 54.4 years, were treated with thirty six 2.8 to 3.4 mm-diameter implants (Straumann, Dentsply Sirona and Anthogyr) in the department of oral surgery of Strasbourg civil hospital from 2010 to 2015. During the control consultations, numerous clinical parameters were evaluated.

Results: The NI replace mainly mandibular incisors, maxillary lateral incisors or premolars. They mainly carry fixed prosthesis. The mean bone loss is 0.69 mm

and the average probing depth is 2.6 mm to +5 years. One implant was lost spontaneously, 1 deposited following a fracture of screws and 1 presented a peri-implantitis. Thus the patients' feeling is good for 82.6 % of the patients.

Discussion and/ or Conclusion: The results of our study are consistent with those observed in the international literature with a cumulative 5-years survival and success rate of 94.4 % and 86.1 %, respectively. There is also a similarity in the frequency, cause and time of implant failures. These are mainly precocious failures or linked to a prosthetic complications.

These results are very encouraging in the choice of use of NI when the residual bone crest is thin or when bone augmentation techniques are impossible, for fixed or removable restorations, even in the posterior regions.

**Presenting author*

FRA-019

Is the Locator® system the most effective removable restorative solution for the atrophic mandible? Clinical cases with the use of Xive implants.

A Salia, M Bei, H Goussias*

Background: The prosthetic rehabilitation of the mandible is a very challenging clinical task, due to the fact that chronic edentulism strongly affects the residual ridge. According to the Mac Gill consensus (2002), the use of an implant overdenture is considered nowadays to be the first therapeutic choice. Especially, in cases of extensive bone resorption, the use of two implants in the mandible is the minimal surgical intervention with significant advantages in overdentures' retention.

Material and Methods: This poster is the outcome of extensive literature research in scientific sites such as PubMed and Sciencedirect with the keywords: implant, overdenture, retention, precision attachments, locator, complete edentulism, removable prosthesis, implant restoration, ball attachments.

Results: The development of prosthetic implant parts from manufactures has given more alternatives in

many prosthetic problems. The main problem is the difficulty of using retentive parts in implants that are not placed parallel as well as the reduced prosthetic space. Locator retentive parts solve effectively these problems allowing implant angulation and provide increased retention without the need of excessive height for their integration in the acrylic mass of the overdenture. Locator system is able to function even if implant divergence rises up to 40 degrees (total).

Discussion and/ or Conclusion: The purpose of this poster is to describe both advantages and disadvantages of locator system, based on recent literature, in combination with the description of interesting clinical cases with the use of Xive (Dentsply Sirona) implants. The management of mandibular edentulism with the use of this system is presented by clinical cases.

**Presenting author*

FRA-020

Are Dentsply Sirona short implants a viable alternative to conventional dental implants for the rehabilitation of the atrophic maxilla and mandible? A clinical case based analysis.

M Bei, A Salia, H Goussias*

Background: The rehabilitation of atrophic maxilla and mandible has been the field of interest for both surgeons and prosthodontists due to their anatomical restrictions. The main problem is the reduced width and especially height of the crestal ridge in the posterior area. This led to the need of alternative solutions avoiding sinus lifting, complicated bone augmentation procedures or the use of overdentures. The purpose of this study is to investigate whether short implants provide an adequate and effective treatment to patients with either medical problems or low financial profile.

Material and Methods: This poster is the outcome of extensive literature research in scientific sites such as PubMed and Sciencedirect with the keywords: implant, short implant, atrophic maxilla, diameter, surface, mandible.

Results: Ankylos (Dentsply Sirona) short-length implants are considered to be those with length

less than 8mm supporting single crowns or multiple unit bridges for fixed and removable prosthetic restorations. Due to chronic complete edentulism, a large amount of ridge height is lost resulting in an increased prosthetic space. Placing a short implant would otherwise indicate that the crown/implant ratio will not be ideal. However evidence based results show that there is little difference in stress concentration between a short and a regular implant.

Discussion and/ or Conclusion: Stress is reduced as implant diameter increases leading to the fact that width is of greater significance than length as far as stress is concerned. In addition, splinted crowns seem to be another factor which reduces stress concentration around the implant resulting in high levels of success and longitude of short implants.

**Presenting author*

FRA-021

The use of the anterior palatal subepithelial connective tissue flap for soft tissue coverture in the anterior maxilla bone augmentation procedures: A clinical report of 5 cases.

E Gulin Arias*, J L Chao, J L Dominguez-Mompell, D R Cantero

Background: Bone atrophies in the anterior maxilla, usually require hard and soft tissue augmentations to achieve aesthetic and functional results. In such cases, primary soft tissue closure after bone augmentation procedures is indispensable for a successful outcome. This report describes the results of the anterior pedicle subepithelial connective tissue flap as a simple method for soft tissue coverage after bone augmentation procedures in the anterior maxilla.

Material and Methods: We present 5 cases with a defect in the anterior maxilla requiring hard and soft tissue augmentations. Two different techniques were used to treat this atrophies; 1- The Split Bone Block (SBB) technique and (3 cases) 2- Guided bone regeneration (GBR) using titanium meshes (2 cases).

We used the anterior pedicle subepithelial connective tissue flap to achieve primary soft tissue closure over the grafted autogenous bone or over the titanium membrane. Implants were placed at the same surgery if a prosthetic ideal position could be achieved. If not, 16 weeks were waited as revascularization

time. All second stage surgeries were performed at 14 weeks after implant placement.

Results: One partial flap necrosis occurred but none exposures of the reconstructed area were reported. No signs of infection or suppuration were not observed in the donor or recipient sites. The implant survival rate is 100% (11) and no signs of peri-implant disease (mucositis or peri-implantitis) in a 4 year-follow-up period. These procedures enhanced the alveolar ridge volume, increased the amount of keratinized tissue, and improved the esthetic profile for restorative treatment.

Discussion and/or Conclusion: The use of anterior pedicle subepithelial connective tissue flap could assist the soft tissue closure of the augmented sites because it provides sufficient soft tissue thickness and an ample vascular supply, protecting the grafting material in case of a wound dehiscence.

**Presenting author*

FRA-022

Integration of teeth in implant-supported removable dentures with Atlantis Conus Abutments: A case report

S Herzog*, M Herzog, M Herzog

Background: The object of this presentation is to demonstrate the established Atlantis Conus-Abutment-Overdenture (OD) system as a very important and useful therapeutic option for the prosthodontic restoration of the partially or completely edentulous patients. The Atlantis Conus Abutments are individually designed using the patented Atlantis VAD (Virtual Abutment Design) software. This ensures that all abutments and integrated teeth are parallel to each other.

Material and Methods: When the patient presented himself in our dental practice, he has 3 remaining teeth in the upper jaw and 1 tooth in the lower jaw.

Results: In order to include the remaining teeth in the prosthodontic concept, he was treated with 3 Ankylos implants in the upper and 4 Ankylos implants in the lower jaw. We followed a delayed protocol with prosthodontic restoration after a three-month healing period post implantation. In the presented case, we used the Atlantis Conus Abutments together with prefabricated SynCone caps for the implants and gold

telescopic crowns for the teeth in order to achieve optimal friction.

Discussion and/ or Conclusion: Using the Atlantis Conus Abutments facilitates the integration of remaining teeth in a telescopic prosthesis because the virtual planning of the abutments ensures that all abutments and integrated teeth are on a parallel axis. The result is perfect friction of the overdenture. Using prefabricated telescopic SynCone caps is economical and convenient at the same time combined with the wearing comfort of a fixed bridge. The implant supported telescopic prosthesis is very simple to handle and it can be removed easily for cleaning by older patients with limited manual dexterity. Due to the extraordinary stability, the users are satisfied and the prosthodontic concept has been a great success. Telescopic prostheses make it possible to integrate existing teeth and implants into the dental prosthesis and thus improve tactility.

**Presenting author*

FRA-023

Interest of the “telescope” prosthesis on implants in the case of complete mandibular edentulism: About a case

B Guiga*, S Mrabet, F Hivelin

Background: In case of edentulous patient, the clinician is often confronted with several therapeutic options. Whenever it is possible, the patient will choose a fixed prosthetic therapy for aesthetic, functional and psychological reasons. Among the proposed solutions, there are removable implant-stabilized prostheses that offer easier oral hygiene and a lower cost. The aim of this work is to present a clinical case of a mandibular removable prosthesis stabilized by the Atlantis Conus Concept.

Material and Methods: Clinical Case: The patient is a 56-year-old woman with bipolar disorder, a periodontal history and a compromised conventional mandibular prosthesis requiring prosthetic rehabilitation. She had an anterior maxillary block present and a complete mandibular edentulous with poor vestibular depth, a gingival recession and narrow prosthetic corridor.

Results: The aim was to make a bi-maxillary treatment combining fixed and removable prosthesis. At the maxillary level, a fixed denture prosthesis was made from the 14 to the 24 associated with a removable prosthesis with a metal frame. At the level of the mandible, a stabilized telescopic prosthesis was made on 4 implants using the Atlantis Conus Concept system.

Discussion and/ or Conclusion: The telescopic prosthesis on the Atlantis Conus Concept system offers a stable and comfortable solution for edentulous patients. It makes it possible to produce stable removable prostheses with a restoration of the masticatory and phonetic function. It is easy to clean and the aesthetic result is satisfactory. The cost is lower than the fixed prostheses allowing patients to have quality dental restoration.

**Presenting author*

FRA-024

Customizing the emergence profile in the esthetic zone. The Atlantis concept.

G Kouveliotis, G Papavasileiou, P Kamposiora*

Background: Congenital absence of maxilla lateral incisor is the second affected tooth having a prevalence of 4.3–7.8 %. Absence of one or two lateral incisors can cause both esthetic and functional problems and a multidisciplinary approach plan has to be established.

Materials and Methods: A 19 years old female patient was referred to the Graduate Prosthodontic clinic during her orthodontic therapy. Treatment plan was developed, including implant restoration of the missing lateral incisor and five all ceramic veneers to the esthetic zone. Following the osseointegration period, implant provisional restoration was constructed to reestablish esthetics and function and at the same time to manage soft tissue esthetics. The provisional period lasted six months where alterations of the proximal and cervical area of the implant restoration were made. After the provisional period, impression of the implant and the adjacent prepared teeth was made. A customized impression coping was created to transfer both implant place and soft tissue morphology. An Atlantis custom

abutment (Dentsply Sirona, Mölndal, Sweden) was digitally designed to preserve soft tissue management. A lithium disilicate crown and five lithium disilicate veneers were cemented.

Results: Soft tissue management, concerning implant restoration, is one of the key factors for a complete esthetic outcome. Healing and provisional time is mandatory for establishing a stable and esthetic gingiva line.

Discussion and/ or Conclusion: In cases of congenital absence of lateral incisor there are many treatment options hence all parameters have to be considered to have an esthetic outcome. The interim period is the most significant factor for the esthetic and functional result. During that time soft tissue and esthetics have to be managed in a precise and satisfactory way. The Atlantis custom abutment permits a natural soft tissue management and maintains the stability during time.

**Presenting author*

FRA-025

Esthetic management of congenitally missing lateral incisors with single-tooth implants

S Kistler*

Background: The absence of maxillary lateral incisors is the most frequent type of congenitally missing teeth among different populations. Achievement of an esthetic single-tooth restoration in the anterior segment is a difficult task for the restorative dentist.

Material and Methods: A 20-year-old female patient with congenitally missing maxillary lateral incisors referred to our dental office. She had received orthodontic treatment for obtaining proper space for the prosthetic restoration. A decision was made for dental implant treatment. To overcome bone deficiency, small diameter implants were placed with labial angulation to avoid labial fenestration (two 3.0 × 11 mm Xive S plus D,). During the healing period, the patient wore an acrylic provisional removable dental prosthesis relieved in the implantation sides. Three months later, cover screws were removed and healing abutments were installed. Temporary crowns were prepared and cemented on abutments for maintaining the tissue form. After four months of healing, the provisional crowns were removed and another fixture level impression was made. The abutment was placed and the final crown was tried in. Once the patient

accepted the esthetics of the prosthesis, the abutment was torqued to 35 Ncm and the all-ceramic crown was cemented.

Results: The dental implant treatment of a patient with congenitally missing maxillary lateral incisors was performed using narrow diameter implants and angled abutments. At the 1-year follow-up, interdental papilla levels were increased gradually and improved natural appearance.

Discussion and/ or Conclusion: The correct three-dimensional positioning of the implants allowed sufficient amount of bone and gingival tissue, which are extremely important for maintenance of supporting tissues on buccal side. For a successful outcome and patient's satisfaction, coordinated orthodontic, prosthodontic, periodontic and restorative treatments are crucial. For the replacement of congenitally missing upper lateral incisors, implant-supported restorations should represent the treatment of choice.

**Presenting author*

FRA-026

The use of Symbios® materials during sinus lift procedure

B Lipko-Lesniewska*

Background: In this case, author presents sinus lift procedure with the use of platelet-rich fibrin (A-PRF) combined with a synthetic alloplastic biphasic material (20/80% HA/ β -TCP) and collagen membrane derived from bovine deep flexor (Achilles) tendon. The photographs and radiographs make it possible to follow subsequent stages of the therapy, i.e. patient qualification for the procedure, planning, surgical procedures, and achievement of the required volume of augmented bone, implantation and placement of dental crown.

Materials and Methods: Sinus Lift procedure, Symbios® materials (Dentsply Sirona) BGM and Collagen Membrane SR. Ankylos dental implant, implantoprosthesis restorations after a period of 12 months.

Results: A total number of 19 sinus lift procedures were carried out at Magic Dental Studio in Przeźmierowo/ Poland in the period from June to October 2015. All the procedures ended in success, i.e. the required bone volume was achieved after 11 to 12 months.

Discussion and/ or Conclusion: Inorganic Symbios® Biphasic BGM material is radioopaque, biocompatible and osteoconductive, and does not cause any irritancy or allergies. After 12 months of sinus lift procedure, orthopantomograms and three-dimensional images allowed noticing a significant increase of volume of the newly formed bone. Preparation of the implant bed resembled to a large extent work with natural bone of D4 class. Symbios® Collagen Membrane SR (Dentsply Sirona) was used during the treatment. This initially rigid membrane requires moistening and after some 10 to 15 minutes it can be easily shaped.

To sum up, this material is worth recommending; it is comfortable in use as well as guarantees a predictable final effect.

**Presenting author*

FRA-027

Vertical bone augmentation using the splitted bone block technique through a tunnel approach. 5 years follow-up.

J L Mompell*, J L Chao, D Robles Cantero, F Escamez Estevez

Background: Many reconstructive techniques have been described to treat the posterior atrophic mandible. Wound dehiscence with exposure and infection of the augmented bone and resorption are two of the main complications of bone grafting procedures, especially in those using vertical onlay bone grafts. The tunnel technique, in conjunction Prof. Khoury's reconstructive model is supposed to provide an excellent protection of augmented bone during healing and stable medium/long term results.

Material and Methods: In this clinical study, 6 patients were treated with this technique between 2009 and 2011. Preoperative bone height was measured on CBCTs Scans taken previous to the grafting surgery. Autologous bone blocks harvested from the retromolar area were used for vertical augmentation. Four months later, an orthopantomography was taken to measure the post healing height. A total of 13 implants were inserted, and bone biopsies from the recipient grafted site were performed. A three months osteointegration period was waited before performing the 2nd surgical stage, where soft tissue was evaluated

to determine if a Kazanjian's vestibuloplasty or a free gingival graft was necessary. A 2nd CT Scan was taken after implants had been loaded. This radiographic examination will be used as control when a new Panoramic X-ray is conducted to analyze resorption of the graft every 12 months.

Results: In all 6 patients the healing period was uneventful. Bone height which was an average of a 5.7 mm was increased to 10.5 mm. None of the 13 implants have failed within a five year load. A minimal resorption of the grafted area 12% was found.

Discussion and/ or Conclusion: Within the limitations of this study, the low rate of wound dehiscence is certainly because the absence of any crestal incision, which may compromise revascularization and thus regeneration of the graft. The bone grafts performed with this technique seems to be stable in a medium period of time.

**Presenting author*

FRA-028

Full digital workflow in immediate implant treatment using Ankylos, Simplant and Cerec

M Nawrocki*

Background: The 47-year old patient was admitted to the clinic with fracture of the tooth 11. Because of the fracture and the tooth external resorption the immediate implantation with immediate restoration (non-functional – without any occlusal contacts) was planned.

Material and Methods: First, the CBCT was taken and then the scan of upper and lower jaw and also buccal scan using CEREC OMNICAM was performed. All scans and CBCT were combined in SIMPLANT and then the best position of the implant ANKYLOS was planned (according to the 3A-2B rule by F.R. Vizcaya). All the data were sent to Belgium where the surgical guide was created and in Sweden the individual abutment – Custom Base Atlantis was produced. Simultaneously my technician in the clinic was able to design virtually and mill the ceramic crown E-MAX using the delivered STL file.

Results: By using the Fotona Lightwalker Er-YAG laser I was able to remove thoroughly granulosa soft tissue which resultant from the tooth resorption. After the atraumatic root extraction the Nd-YAG laser was used for bone disinfection. The implant Ankylos CX B14 was inserted in the correct position with the use of surgical guide SIMPLANT. The Emax crown was previously milled in CEREC and cemented extraorally with abutment Atlantis Custom Base and then after the implantation immediately screwed to the implant.

Discussion and/ or Conclusion: Intraoral scanning and digital planning enables us to treat such a demanding cases much faster and more accurate. This approach gives us convenient and predictable protocol for immediate implantation and restoration especially in the aesthetic zone.

**Presenting author*

FRA-029

Guided bone regeneration with Biphasic® bone graft material: Retrospective clinical study

J-M Offerle*, S Pierre Olivier, P Keller

Background: The development of bone augmentation procedures allows placement of dental implants in atrophic area. The guided bone regeneration (GBR) is a well-documented technique to increase the buccal volume. The objective of this study is to show the interest of using Biphasic® bone graft material (Dentsply Sirona) associated with a slow resorbable membrane (Symbios®, Dentsply Sirona) during the implant insertion.

Material and Methods: Ten patients (7 women and 3 men; mean age 42.3 years) treated with 14 implants and simultaneous guided bone regeneration were selected for the study. This series of cases was carried out in private practice and was treated exclusively by the same operator. The intervention consisted in the insertion of implant (Xive®, Dentsply Sirona). In this time, a layer of biomaterial (Biphasic®) was stabilized with an appropriately sized slow resorbable membrane (Symbios®). This membrane was fixed on the buccal

side with titanium pins and sutured on the palatal side. In this retrospective study, volumetric changes at GBR graft sites were evaluated using cone-beam computed tomography. We compared volumetric changes before GBR and after prosthetic restoration in horizontally deficient maxilla. The measurements were made 1 mm below the highest point of the remaining crest at the center of the future implant.

Results: No patients had postoperative complications. All implants were osseointegrated after 4 months healing time. The mean width of the regenerated ridge was 6.8 mm.

Discussion and/ or Conclusion: GBR with biphasic® and Symbios® membrane seems to be an effective and safe procedure for treatment of width insufficiency of alveolar ridges.

**Presenting author*

FRA-030

Increase of the transverse volume by guided bone regeneration with Biphasic® after autogenous bone graft case report

J-M Offerle*, S Pierre Olivier, P Keller

Background: In implant surgery, enough volume in the anterior region allow a better prosthetic restoration and support of the upper lip.

The objective of this poster is to expose a case-report of guided bone regeneration (GBR) using Biphasic® biomaterial (Dentsply Sirona) associated with a slow resorbable membrane (Symbios®, Dentsply Sirona) during the implant insertion, 4 months after the bone grafting procedure.

Material and Methods: Clinical Case: We report the case of a 70-years-old patient, without medical / surgical history. This patient needs an aesthetic implant restoration concerning the anterior and right posterior maxilla.

Results: The bone defect was grafted in the anterior area with autogenous bone blocks and in the posterior area by sinus floor elevation. The next intervention, 4 months later, consisted in the insertion of five implants (Xive®, Dentsply Sirona). In this time, a layer of Biphasic® biomaterial was stabilized with an appropriately sized slow resorbable membrane (Symbios®, Dentsply Sirona). This membrane was

fixed on the buccal side and sutured in palatal side. Four months later, the second stage surgery was performed with apical reposition flap to augment the buccal keratinized gingival. Definitive prosthetic restoration was inserted after soft tissue maturation with provisional bridge.

Discussion and/ or Conclusion: The GBR was done during the implant insertion, 4 months after the autogenous bone grafting. It is known that the biomaterial is mainly integrated in the connective tissue and not into the bone as demonstrated by Cordaro et al. A slow resorbable membrane was choose over the biomaterial because different clinical studies have demonstrated the application of a resorbable membrane reduces the rate and severity of complications compared to non resorbable membranes (Proussaefs and Lozada, 2003). The surgical procedure by GBR associated with Biphasic® biomaterial and Symbios® membrane during the implant insertion after autogenous bone grafting improve the support of the lip and the pontic.

**Presenting author*

FRA-031

Prosthetic rehabilitation of implant-supported 4-unit bridge with custom implant abutments (Atlantis abutment) in the aesthetic zone

S Babi, K Sava, G Papavasiliou*, P Kamposiora

Background: The introduction of dental implants in prosthetic dentistry has provided us with alternative solutions, especially in partial edentulous patients. In cases that a conventional prosthesis is not an option, such as neighboring teeth that are intact or that already support FPDs, implants can offer prosthetic solutions. Aim: The purpose of this case report is to present the treatment of a patient with 2 custom abutments (Atlantis abutments) and a 4-unit implant-supported fixed dental prosthesis.

Materials and Methods: A 67-year old male patient with increased tooth mobility on maxillary incisors was referred to the Postgraduate Prosthodontics Clinic, Dental School of the University of Athens. He reported history of periodontitis that was previously treated and prosthetic rehabilitation of his maxilla with fixed dental prostheses. Clinical examination revealed periodontally compromised incisors with class III mobility, and canines that already supported FPDs. Clinical and radiographic evaluation of the prostheses did not reveal any signs of problems that required retreatment with new ones.

Results: After the CBCT examination the extraction of four incisors was decided, followed by immediate placement of two implants in the region of the lateral incisors and placement of a 4-unit implant-supported fixed dental bridge. A temporary, screw-retained implant-supported bridge was constructed. After 4 months of soft tissue management a custom impression was made. As the implants were placed 7 and 6 mm subgingivally, custom implant abutments (Atlantis abutment) were chosen for the final restoration, which was a 4-unit cement-retained implant supported bridge.

Discussion and/ or Conclusion: The use of custom made abutments (Atlantis) is an alternative method in cases with deep implant placement that ensures the correct emergence profile and elevates the margin of the restoration in an ideal position, reducing biological complications.

**Presenting author*

FRA-032

Mandibular vertical ridge augmentation using blocks and particulated autogenous bone with Symbios collagen membrane SR on the lingual side: A case series of 15 patients

S Pierre Olivier*, P Keller, J-M Offerle

Background: Vertical bone graft in posterior mandible is a challenging procedure. The aim of this study is to propose an approach to stabilize the particulate bone graft on the lingual side of the 3D bone augmentation in posterior mandibular using a Symbios collagen membrane SR (Dentsply Sirona).

Materials and Methods: 15 patients were treated within this study (20 sites) with posterior mandibular edentulous ridges and insufficient bone to allow implant placement. All sites presented severe vertical defect (more than 5mm) and thin crest. A block graft was harvested from the retromolar area (Frios MicroSaw – Dentsply Sirona). The bone block was bisected along to obtain two bone laminae (as proposed by F. Khoury). After the stabilization of the occlusal block with screws, a slow resorbable membrane (Symbios Collagen Membrane SR) was placed in lingual. Then the buccal block closed the box, stabilized by screws. Defects were measured during the grafting procedures with a calibrated periodontal probe. At implant placement, 4 months

after the grafting procedures, bone regeneration was evaluated. Complications were recorded. Cone beam (CBCT) was performed to quantify the end result.

Results: 42 implants were placed in 15 patients with 20 sites. No complications were associated. Clinical measurements of the vertical defects revealed an average of 5.8 mm. Clinically all treated ridges were sufficient for subsequent implant placement. On CBCT, there is no invagination of the particulate bone graft on the lingual side. All implants have survived, with an average follow up period of 14 months.

Discussion and/ or Conclusion: The good graft stability after healing period and implant survival show the potential of this technic for the treatment of severe vertical posterior mandibular defect. The Symbios collagen Membrane SR (Dentsply Sirona) avoids the movement of the bone graft particles in the lingual side and maintain a good bone graft volume.

**Presenting author*

FRA-033

Interest to use the bone lid to close the maxillary sinus window during sinus grafting with Symbios Biphasic. Follow up of 14 cases at 1 year.

S Pierre Olivier*, **P Keller**, **J-M Offerle**

Background: The objective of this work is to describe the interest to reposition the bone lid on a bed of particulate autogenous bone placed on the Symbios Biphasic (Dentsply Sirona) to be able to insert the implants at 3-4 months.

Material and Methods: In 2015, 14 sinus lift were selected. 21 implants (Xive®, Dentsply Sirona) was inserted (8 simultaneously and 13 differed at 3 months). The bone lid is taken during the opening of the buccal wall and preserved in physiological saline solution. It is repositioned on a bed of autogenous particulate bone placed on the Symbios Biphasic (β -TCP+HA from red marine algae) what allows a stabilization of the clot. A radiologic control (OPT) was realized 1 year after the implants insertion.

Results: The 21 implants were osseointegrated at the second stage surgery. No perforation of the membrane occurred during the harvesting of the bone lid. Two perforations were observed during the membrane lifting (closed by sutures associated with

collagen sponge). No infection observed. The buccal wall was perfectly healed at the reopening. In case of differed implants placement, the Symbios Biphasic was successfully regenerated. All of them were inserted at 3-4 months after the first surgery. The OPTs 1 year after show good bone graft stability.

Discussion and/ or Conclusion: Park and al. described the bony window repositioning in 2012, without bone particle under the bone lid. The implant placement was also delayed at 6 months. Furthermore, the infection risk remains higher in case of membrane using (from 1.8% to 14.5% of fail in the literature) The Symbios Biphasic seems to be a good alternative to avoid bovine bone material. The autogenous bone placed on the Symbios Biphasic (Dentsply Sirona) seems to have the effect of accelerating the healing allowing the premature insertion of implants at 3-4 months.

**Presenting author*

FRA-034

Guided immediate implantation – immediate loading – immediate smile result after 4 years

B Roland*, F Kornmann, T Gerlach

Background: One of the major benefits of guided surgery and virtual implant planning is that they already included the prosthetic treatment during the planning phase. This combination of surgical and prosthetic data enables us to prefabricate provisional bridges and crowns for an immediate loading protocol very easy. The immediate restoration of implants brings many advantages like bone training and soft tissue management to the implant treatment.

Material and Methods: This case shows a 47 years old male patient with failing teeth 12–22. A CBCT scan was used to plan the implant positions and the prosthetic treatment virtual in the Siplant Software. This information was used to fabricate a surgical guide and a so-called “Immediate Smile Model”, which enables the technician to also prefabricate the provisional restoration. During surgery the teeth were extracted minimally invasive followed by a full-guided immediate implantation of 4 Ankylos implants. The implants were restored with the CAD/CAM prefabricated provisional directly.

Results: 4 month after implantation all 4 Ankylos implants were osseointegrated and the soft tissue was free of inflammation and in ideal anatomic shape. The final crowns on individual abutments were produced and placed. After 48 month all criteria are in very good conditions.

Discussion and/ or Conclusion: The use of 3D planning software in combination with CAD/CAM technology ensures a safe, precise and predictable implant placement. Flap free technique avoids swelling and keeps the supra-crestal vasculature intact resulting in a better nutrition of the underlying bone. This guarantees a high chance of osseointegration in combination with immediate loading and implantation. For the patient the procedure is very comfortable and nearly painless.

**Presenting author*

FRA-035

Digitalized treatment process of full mouth reconstruction

G Siavikis*

Background: New materials and procedures in digital dentistry such as navigated implant placement, digital impression of teeth but also implants and the computer-aided processes of designing and manufacturing prosthetic restorations have made the digital treatment more effective but also more approachable and accessible to lots of dentists.

Material and Methods: In this case report it will be analyzed the prosthodontic treatment of a patient through a complete digital workflow.

Results: Patient presented for complete restoration in the maxilla and mandible. Implants were placed by computer-assisted planning and navigation. For the rest of the missing teeth fixed dental prostheses (FDPs) were manufactured by a computer-aided

design/computer-aided manufacturing (CAD/CAM) system (Sirona) after optical impression with an intraoral scanner (Cerec Omnicam), and data transfer to the laboratory.

Discussion and/ or Conclusion: The CAD/CAM technology allows the dentist and the laboratory to work with high precision and accuracy but also reduce the workflow and have great control over the procedure at any moment. These advantages may have a potential positive effect with regard to patient satisfaction compared with conventional methods. With the digitalized treatment options we can plan backwards and restore knowing where to go.

**Presenting author*

FRA-036

Minimally invasive strategies in atrophic situations

- 1) Transcrestal sinus floor elevation independent of vertical bone height
- 2) Sinus floor elevation and simultaneous implant placement with less than 4 mm of vertical bone height
- 3) Flapless crest splitting

C Steiner*

Background: Conventional bone augmentation procedures like lateral approach sinus floor elevation and bone block transfer are frequently associated with marked pain and swelling for the patient. Two-stage sinus floor elevation is linked to an increased treatment time.

Material and Methods: Piezotome 2 (Acteon Satelec, Bordeaux, France) was used in combination with the Intralift kit to perform transcrestal sinus floor elevation and in combination with the Crest Split kit for crest splitting. Xive S plus and Astra Tech EV C implants (Dentsply Sirona, Salzburg, Austria) were inserted using the Implantmed device (W&H, Bürmoos, Austria). BioOss and BioGide (Geistlich Pharma AG, Wolhus, Switzerland) were used for augmentation.

Results: In case 1, a sinus floor elevation was achieved by a transcrestal approach in spite of poor vertical bone height. In case 2, sinus floor elevation and implant placement were performed in one single surgery in less than 4 mm of remaining vertical bone height by using a conical implant with coronal

microthread. Case 3 shows splitting of the horizontally atrophic alveolar crest by piezosurgery without raising a mucoperiosteal flap and simultaneous implant placement.

Discussion and/ or Conclusion: Transcrestal sinus floor elevation using piezosurgery (Intralift technique) is not limited to sufficient vertical bone height. Even cases with only 1 to 2 mm can be managed. Conical implants with coronal microthread can be placed simultaneously to sinus floor elevation even in situations with only 2 to 4 mm of remaining bone height. Careful insertion by hand is crucial for gaining sufficient stability. A classic two-stage approach can be avoided in many situations. Crest splitting is the method of choice in the horizontally atrophic alveolar crest with preserved vertical height. Using piezosurgery, detachment of the periosteum as the major source of blood supply for the bone is not necessary.

**Presenting author*

FRA-037

5 years of clinical experience with crown abutments

H Steveling*

Background: Surplus of cement is discussed as an important etiological factor of early peri-implant diseases. To eliminate this risk factor zirconia abutments are available. Individualized with dental ceramic they are fixed directly to the implant, using an occlusal access to the screw.

Material and Methods: 109 crown abutments with 5 different interfaces were used for the replacement of molars and bicuspid in the maxilla and mandible. The crown abutments were designed using a wax-up for all crowns and using a cut-back software to create the space for an optimal thickness of the dental ceramic. A guide splint was made for every restoration to place them exactly to the implant. Intraoral x-rays were made to control the fit before closing the access hole with composites. All restorations were clinically checked in 3 months intervals in the first year then followed by an annual check.

Results: All crowns could be placed without corrections of the proximal contact point. After placement a light anemia disappeared after some minutes. Although the dental hygiene was not perfect in some patients, the soft tissue around these crowns showed no clinical sign of inflammation. Two abutments (1 molar /1 bicuspid) fractured after a period of about 1 year. Both were placed on 4.0 diameter Astra OsseoSpeed TX implants.

Discussion and/ or Conclusion: Since there is no need for any kind of cement, zirconia crown abutments seems to be an ideal way for single crown restorations on implants with a perfect axial position.

**Presenting author*

FRA-038

Effect of the final drill on the surrounding bone of the implant: Verification from insertion torque

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Background: Primary stability in implant placement is a crucial aspect when patients are treated for immediate loading and for immediate implant placement in post-ex site. However, there are reports proving that high insertion torque value hampers early marginal bone resorption and osseointegration. Insertion torque value (ITV) is greatly related to the macro and microgeometry of the implant and to its surgical osteotomy. One of the major complication observed in the early phase is a bone loss due to high pressure and necrosis of the cortical layer. In this clinical evaluation we examined the effect of the final drill on the surrounding bone of the implant.

Material and Methods: 61 Astra Tech Implant System EV implants were inserted in the lower jaw between October 2015 and December 2016. 11 implants were inserted in bone quality Type 1, 29 in Type 2, 19 in Type 3 and 2 in Type 4. The final drill used was either X drill and V drill, depending on the perception of the clinician and the ITV were recorded.

Results: Among the 61 implants placed, two implants disintegrated, which were implants bicortically placed in Type 1 bone. We obtained higher ITV compared to the values obtained by using the X drill as compared to the V drill. Overall, implants placed after the V drill presented higher ITV than that of the ones after the X drill. Detailed distribution is presented in Table 1.

Discussion and/ or Conclusion: We found that for EV implants, the ITV was clearly higher than for the reported values obtained for the TX implant. Moreover, the drilling protocol selected had a great impact on the ITV as an outcome. Drilling protocol that induces strong pressure to the bone during implant placement, may increase the risk for compression osteonecrosis. It can be suggested that a wider osteotomy that reduces the compression to the surrounding bone may result in improved clinical success.

**Presenting author*

FRA-039

New implant in immediate implants and in sloped ridges

A Coscarella*

Background: By scientific studies produced in recent years it has been confirmed, in selected cases, the validity of the post-extraction implants. The use of this method implies a lower emotional impact, a single surgery and a healing often better for the patient. We will be discussed traumatic extraction methods, perfect insertion of the implants with or without bone regeneration with bone substitutes and membranes and the opportunity to combine an advanced method as immediate implant with the execution of an immediate loading to restore aesthetics in more complex cases with new type of implant, perfect for immediate implants and sloped ridges. The use of new implant can give the surgeon more weapon to an ideal result in case of immediate implant and sloped ridges.

Material and Methods: Will be highlighted surgical procedures and periodontal and aesthetic results to 6 years. Profile Astra Tech Implant System, Bio-Oss collagen Geistlich, Ptfе sutures by Omnia. A gentle extraction with vestibule bone preservation and if is possible a flapless implant insertion. The implant

insertion 2 mm under bone crest in immediate implant with the sloped face of implant usually vestibular; the gap is filled with Bio-Oss collagen Geistlich and an occlusive suture is recommended in case of flap. After 4 months the second stage with an anatomic healing abutment, and after 1 month the impression and the final crown in porcelain fusion to metal or titanium zirconia.

Results: 60 implants inserted in 6 years in Coscarella Clinic (from 2011 to 2017): 100% success rate; very low bone resorption after 6 years in immediate implants, no resorption in healed sloped ridges; excellent healing of peri-implant tissues.

Discussion and/ or Conclusion: A new implant has been used for 6 years in immediate implants and for implant therapy for sloped ridges with a success rate about 100%.

**Presenting author*

FRA-040

The Ankylos implant system for post extractive cases

A Tedesco*

Background: The aim of this work is to evaluate the Ankylos implants system for post-extractive and immediate loading rehabilitation.

Material and Methods: During a two years follow-up period were placed 180 Ankylos implants in post-extractive site. All the implants used were inserted with an atraumatic extraction, without flap, over 35Nc torque and provisional crown in lithium disilicate with Cerec system. The patients, no smokers, in good health, were treated with insertion of Ankylos implants after tooth extraction in central and upper premolar area and immediate loading. Only one case was treated with insertion of 10 post-extractive implants. After Tc Cone Beam, the surgery was performed under local anesthesia.

Results: It was not making any flap and the extraction was performed trying not destroy the bone tissue. The provisional crown was performed with Cerec system and lithium disilicate. No relevant complications were noted. The implant survival rate was 100%.

Discussion and/ or Conclusion: The Ankylos implants system represent a valid procedure for post- extractive cases with Cerec solutions and his components are ideal structures for the immediate loading.

**Presenting author*

FRA-041

Immediate implantation as the best treatment of a single tooth replacement after injury in the anterior maxilla

S Gurbanov*, E Krenz , G-H Nentwig

Background: Fifty one year old male patient arrived in our clinic (dental emergency) with avulsion of the tooth 11 after injury. The root of the tooth 11 was dry for about 2 hours. The emergency therapy was root curettage, to remove of avital desmodont and the tooth replantation after extraoral root canal treatment. We informed our patient about the poor prognosis in 2-10 years due to root resorption and bone loss. We discussed with patient different therapies. Patient decided to have implantation.

Material and Methods: For better diagnostics we made CBCT (cone beam computer tomography) to see the three dimensional situation of the bone in region 11. This exhibited the fracture of the buccal bone region 11. One week later we carried out the immediate implantation (Ankylos, Dentsply) with simultaneous crestal ridge augmentation using xenogeneous bovine graft material (Geistlich Bio-Oss) after extraction of 11. The torque of the implant was about 50 Ncm, so it was ready for immediate non-occlusal loading.

Results: The immediate implant placement in postextraction sockets is a surgical option which is, to our opinion, one of the best opportunities to preserve architecture of the hard and soft tissue. Many authors have investigated this problem and obtained good results regarding the marginal bone level on the long run. In particular, this is very important for the aesthetic result in the anterior maxilla. Patients appreciate a fast rehabilitation after injury of frontal upper teeth with nearly the same outcome as it was before.

Discussion and/ or Conclusion: The immediate implantation has more advantages than disadvantages. Disadvantages are high cost of the treatment and the surgical intervention. Advantages are the short treatment time, reliable functional and aesthetic rehabilitation and only one operation. Most of the patients are satisfied with aesthetic and functional results after immediate implantation.

**Presenting author*

FRA-042

Guided implant placement instead of a sinus grafting procedure

S Gurbanov*, P Thorsten , G-H Nentwig , M Krebs

Background: A 45 year old male arrived in our clinic asking for an implant borne restoration for a single-tooth gap. He refuses Maxillary Sinus Floor Augmentation. A guided implant placement instead of a sinus grafting procedure was suggested and the patient agreed with our treatment plan.

Material and Methods: For precise planning a CBCT was performed to three dimensionally evaluate the bony situation and the anatomy of the maxillary sinus. A flapless implantation in region 26 (Ankylos Dentsply-Sirona) was performed with the help of a guide (Ankylos Simplant, Dentsply Sirona). The insertion torque of the implant was about 30 Ncm, sufficient for immediate non-occlusal loading. An individual prefabricated Abutment (Atlantis, Dentsply Sirona) was immediately inserted and provisionalized with a pre-milled temporary PMMA-crown. The abutment was designed on a virtual export of the planned implant position (Simplant Immediate Smile, Dentsply-Sirona). The temporary, as well as the final zirconia framework were designed on a STL-Export of the planning data of the abutment (Atlantis-Core File, Dentsply Sirona) without a physical

model. Furthermore a registration of the final zirconia framework was performed immediately after installing the abutment with the final torque (15 Ncm).

Results: The post-operative X-ray demonstrates an exactly positioned implant between the root of tooth 25 and the sinus-floor. Precision is a prerequisite for the prefabrication of prosthetic parts such as individual abutments and provisional crowns. The workflow demonstrated avoided an elevation of a mucoperiosteal flap, causing less pain and discomfort to patient. It avoided a sinus grafting resulting in saving treatment time and saving money for this additional surgery.

Discussion and/ or Conclusion: This case report shows that it is possible to insert an implant in areas with limited space between anatomical structures avoiding sinus grafting. Besides the patients can benefit the possibilities of immediate reconstructions with individual abutments, which saves additional treatment time.

**Presenting author*

FRA-043

The use of tooth-supported guide in advanced resorbed mandible

A Karimova*

Background: Rehabilitation of edentulous mandibular by a fixed implant supported prosthesis is a routinely used treatment option. Nevertheless preliminary planning need to be done in order to prepare extractions, management of soft and hard tissues and prosthetic temporization. In case of critical anatomic situation such as high level of bone resorption or nerve proximity, computer-guided implant procedure have been recommended (D'haese et al. 2017)

Material and Methods: Patient with a chief complain of fixed denture to replace an old and inadequate partial denture has been took in charge in private dental office. At first appointment he presented mobilities and sensibilities on residual anterior mandibular teeth. After clinical and X-ray examination the case was planned using Siplant and implants placed using tooth-supported guide.

Results: After extractions of 31 32 41 42, 4 implants Ankylos were placed immediately, flapless, in position of 32 34 42 44 using tooth-supported guide. Remained 33 and 43 were extracted in the end of the surgery. The patient received the

provisional screwed rehabilitation the same day of the surgery. After 3 months of healing, the final impression was taken and the prosthesis was finalized with a computer-aided design/computer-aided manufacturing titanium full-arch screwed framework Hybride Atlantis ISUS Additive Manufacturing with composite veneering.

Discussion and/ or Conclusion: The tooth-supported guide was chosen because of the lower angle deviation and lower deviation at the apex compared to bone-supported guides (Raico Gallardo et al. 2016). The implant fixed complete dental prostheses shows a survival rates about 98.61% at 5 years to 97.25% at 10 years (Papaspriidakos et al. 2014). The use of surgical computer-guided planning changes the surgeon's approach: the use of computer guides allows to avoid anatomical difficulties and to insert the implant in a precise way. The implant supported fixed denture shows a great survival rate and the immediate loading of implants shows a high patient satisfaction.

**Presenting author*

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